

AC Servomotors / Servo Drives

G5 Series

Extreme mechatronics meets  X-Stream Automation



» Sub micron precision and ms settling time

» Motion network and safety built-in

» Double registration and full closed loop

Extreme mechatronics...

At the heart of every great machine

Great machines are born from a perfect match between control and mechanics. G5 gives you the extra edge to build more accurate, faster, smaller and safer machines. You will benefit from an almost 25% reduction in motor weight, and gain 50% cabinet space.

You will achieve sub micron precision and ms settling time. Some might call it perfection, we just call it tireless innovation to help you build great machines.

Panel operator functions

- Display shows user selected data
- Keys for setting/monitoring parameters
- 2 configurable analog outputs for monitoring

Rugged and smart design

- IP67 motor and connectors
- No flying leads
- 5G vibration resistance

40% reduction in motor cogging

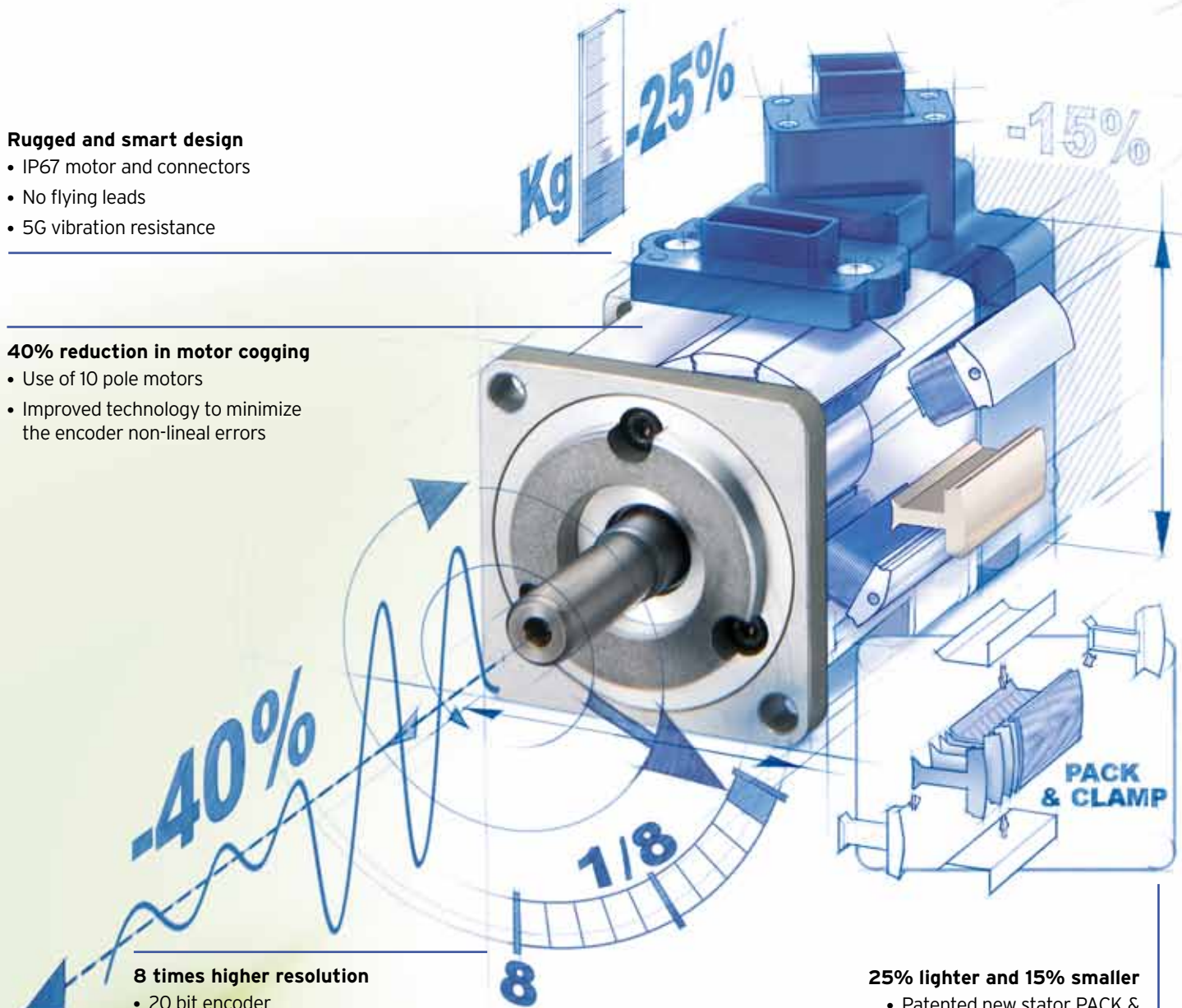
- Use of 10 pole motors
- Improved technology to minimize the encoder non-linear errors

8 times higher resolution

- 20 bit encoder
- Faster processor

25% lighter and 15% smaller

- Patented new stator PACK & CLAMP technology
- 40% reduction in iron losses
 - 45% smaller encoder



Up to 50% cabinet size reduction

- Up to 40% smaller drive
- Extra 10% saving thanks to side by side mounting

Safety conformance

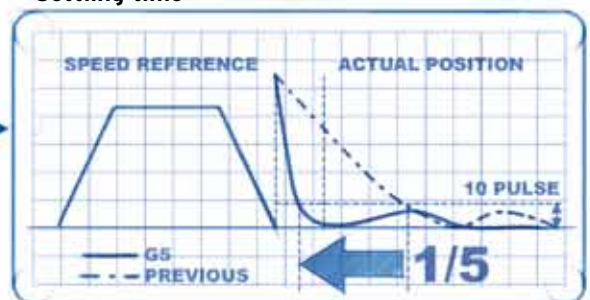
- PL-d according ISO13849-1:2008
- STO: IEC61800-5-2:2007
- SIL2 according to EN61508:2001
- Cat.3: EN954-1:1996



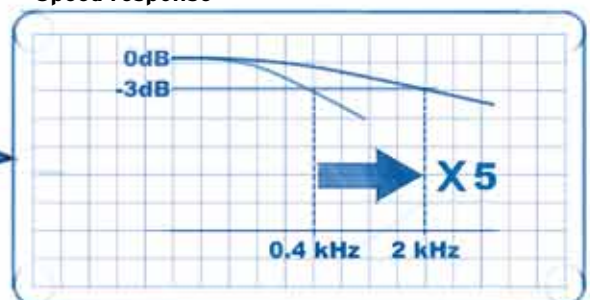
Fast & accurate

- 5 times faster settling time -0~2 ms
- 2 kHz speed response
- Torque feed forward reduces following error

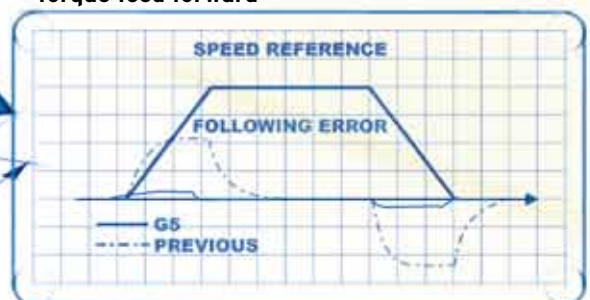
Settling time



Speed response



Torque feed forward

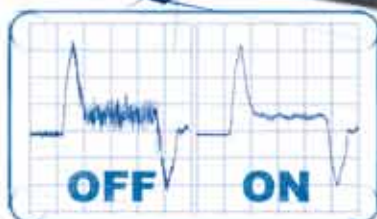


100,000 hr operation in rugged industrial conditions

- No fan below 1 kW
- Long life capacitors

Load vibration suppression

- Up to 4 preset frequencies
- Setting frequency from 1 to 200Hz



Vibration suppression



... meets X-Stream Automation

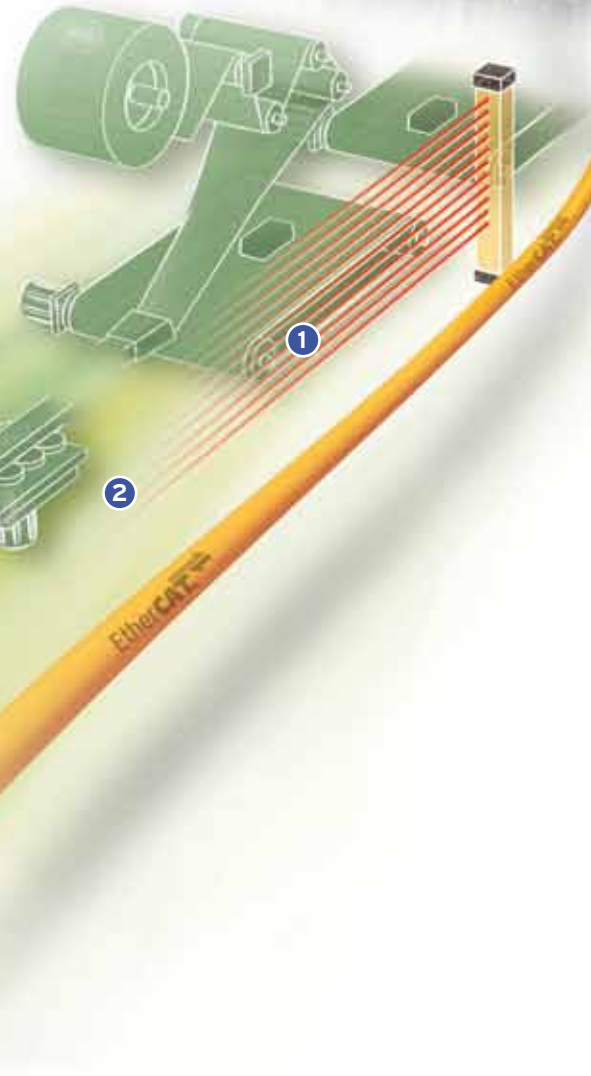
G5 seamlessly integrates into Omron's ONE SOFTWARE - ONE MACHINE CONTROL automation architecture. It utilises Ethernet connectivity and is fully configured through the SYSMAC STUDIO. G5 also simplifies your mechanical and electrical design by including double registration input, full closed loop and multi-drive safety functionality.

- 1 Built-in safety: multi-drives in a single safety relay circuit**
The two safety inputs and the external device monitoring (EDM) output can be linked from one servo drive to another without using additional safety relays. Up to 8 servo drives can be connected to a single safety relay, saving hardware and wiring costs.

- 2 Full closed loop**
G5 has a built-in external encoder input for full closed loop operation, for when additional accuracy is required. The external encoder input eliminates the errors caused by, for example, slip in the material.

- 3 Double registration input**
G5 increases application versatility by providing 2 independent registration inputs per axis, especially relevant for applications such as flow wrappers. By registering the product input position and the mark position on the film, the system can make relative corrections ensuring high accuracy with a simple mechanical design.

INTEGRATED
FUNCTIONALITY



2

3

Machine Automation Controller

NS HMI

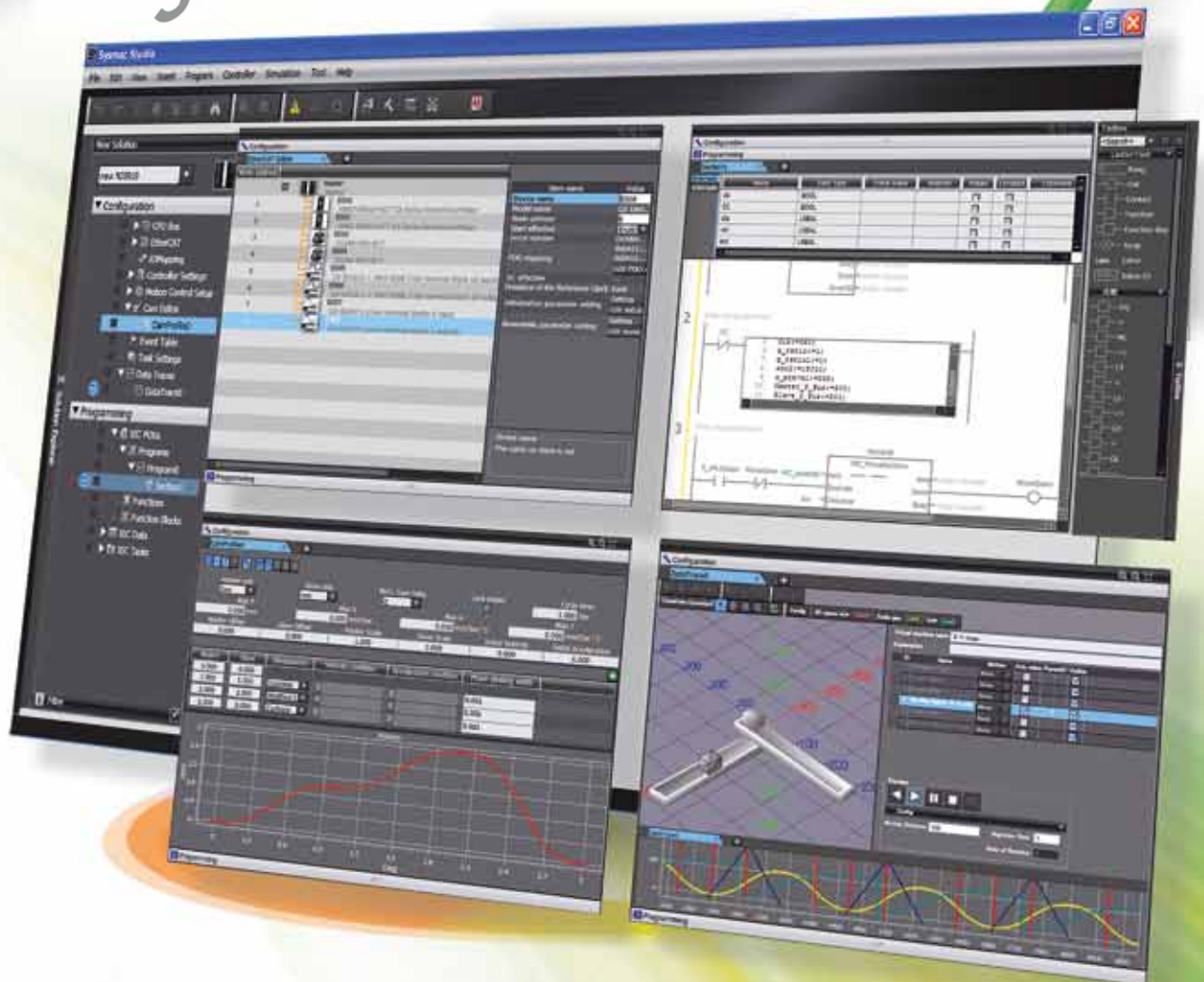
EtherNet/IP

EtherCAT

ETHERNET
CONNECTIVITY
ONE
SOFTWARE

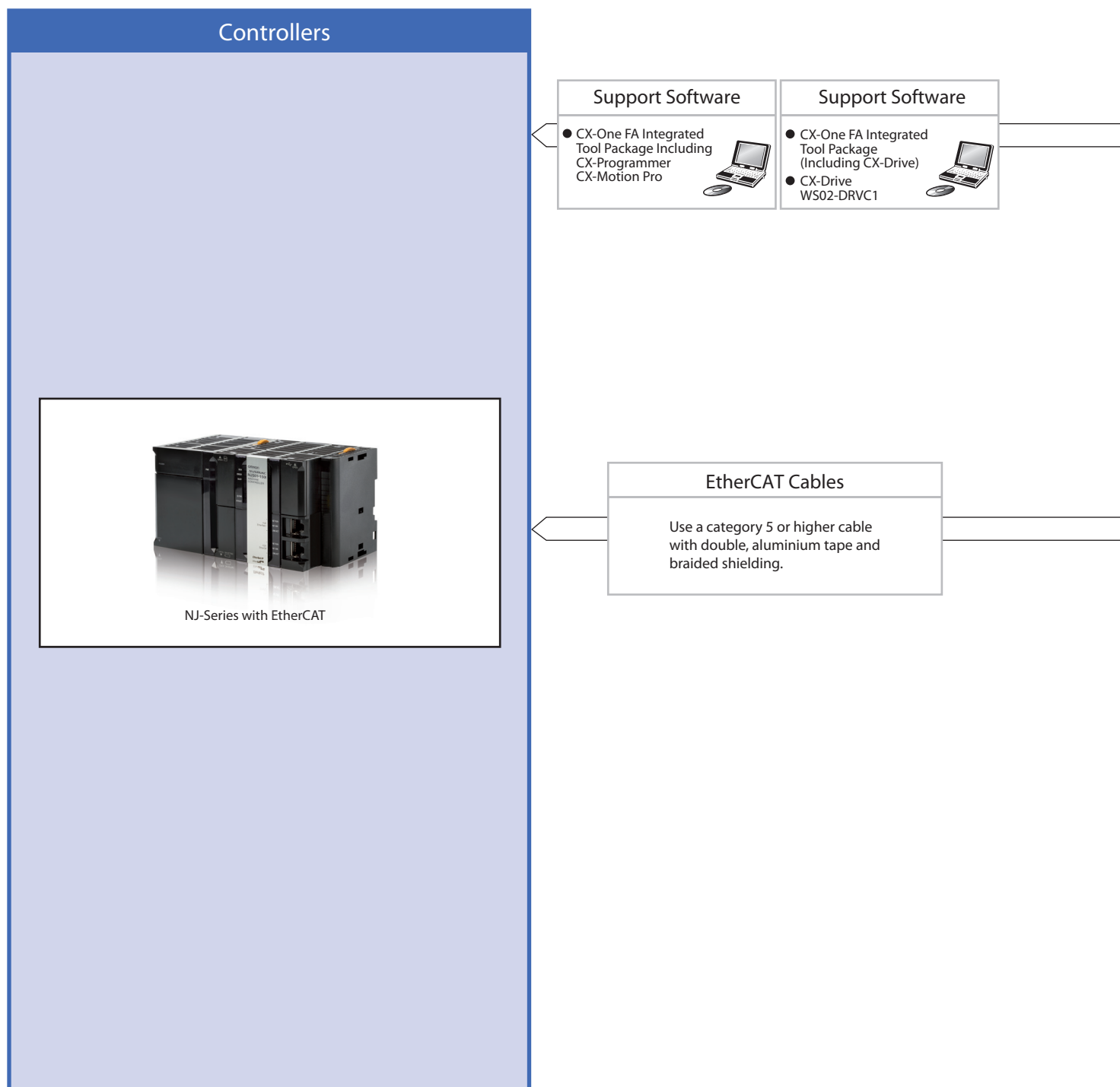
One software - SYSMAC STUDIO

- Full access to all devices from one connection
- One software for machine control programming, configuration simulation and monitoring



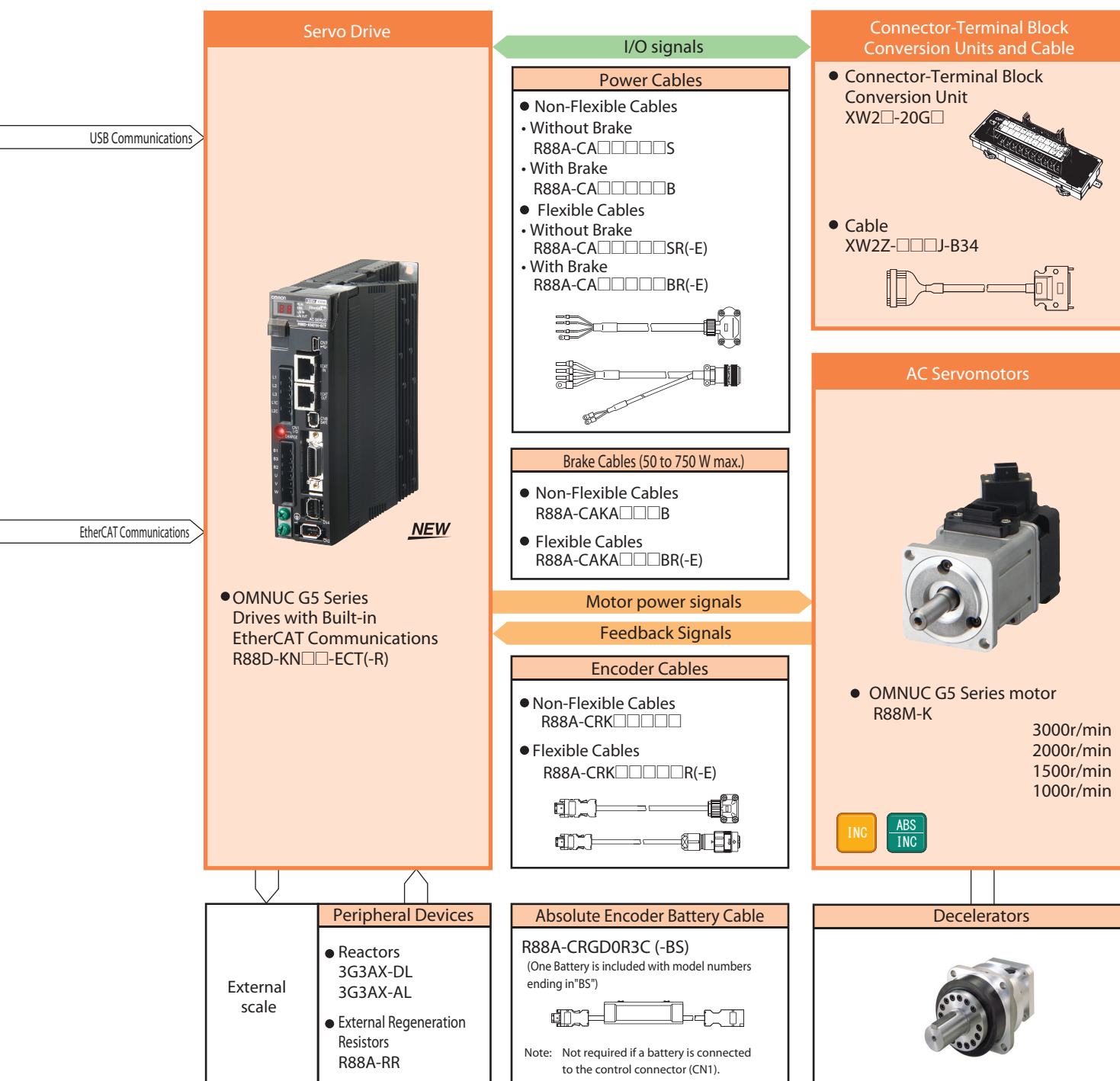
R88M-K/R88D-KN□-ECT

System Configuration



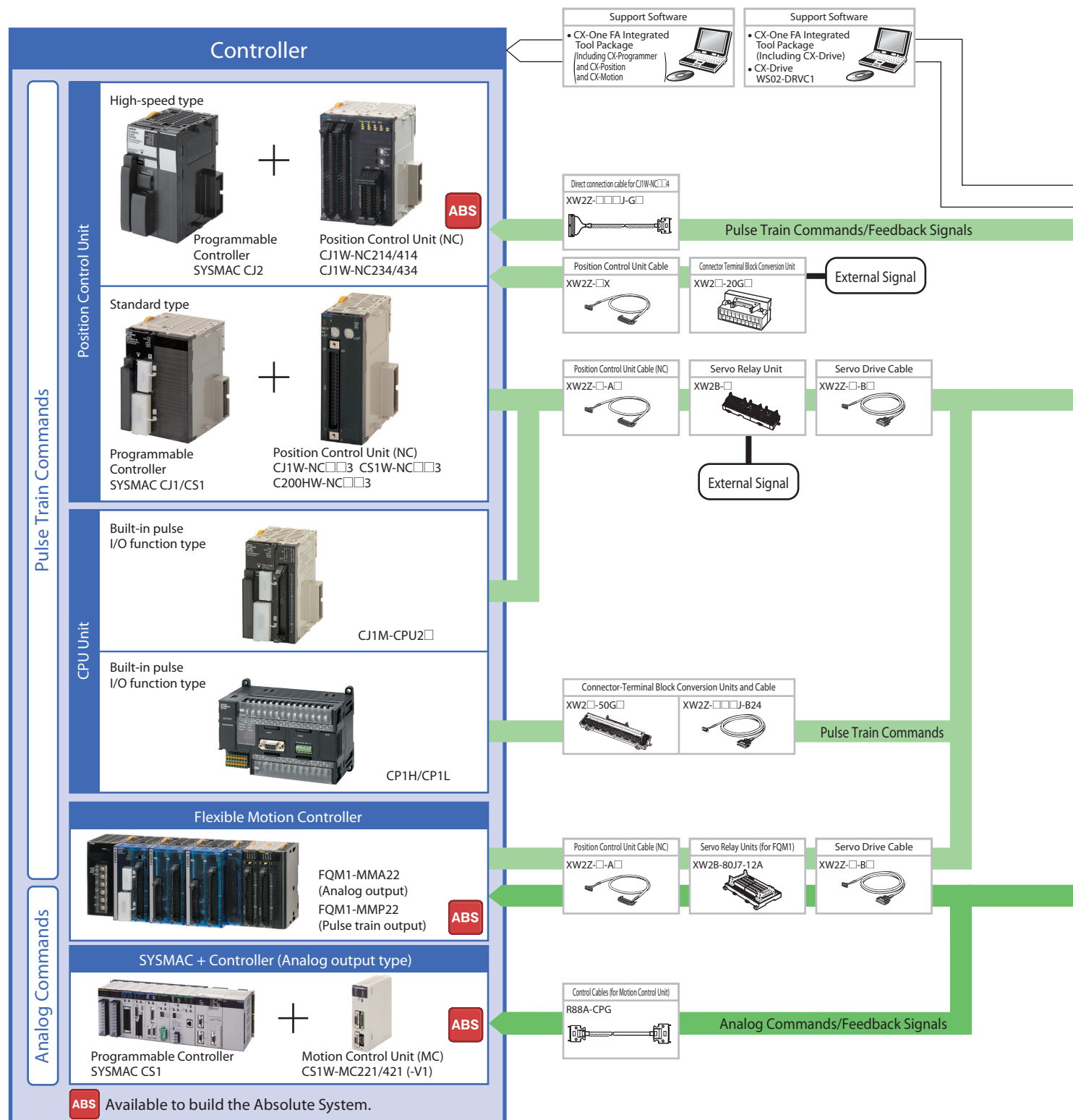
High-Speed and High-Precision OMNUC G5 Series EtherCAT Communications with the Controller

- High-accuracy positioning with fully-closed control.
- Servo Drives for 400VAC widens applicable systems and environment, including large-scale equipment and overseas facilities.
- Safe design and Safe Torque Off (STO) function.
- Vibration can be suppressed in acceleration/deceleration even in low-rigidity mechanical systems.



R88M-K/R88D-KT

System Configuration



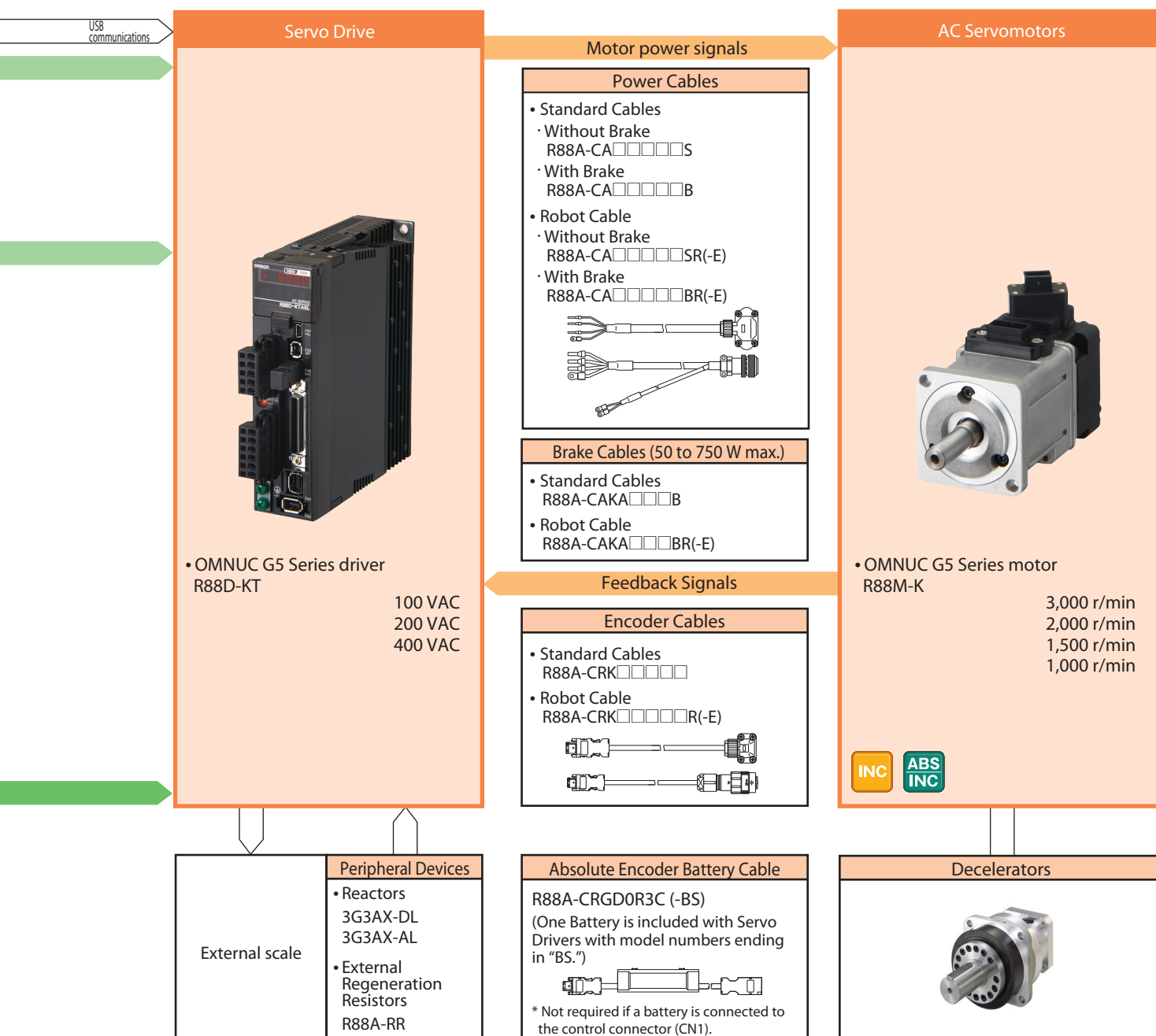
The Preeminent Servo That Revolutionizes Motion Control

- Industry Top-class Tracking Performance.
Speed Response Frequency of 2 kHz.
- Best Positioning Accuracy.
Featuring a 20-bit high-resolution incremental encoder.
- High-precision Positioning.
Fully Closed Loop Control Is a Standard Feature.
- Conforms to the Latest International Standards.
Safety and Productivity.
- Globalization. Lineup of 400 VAC Servomotors.
- Block Programming



Product configuration list

Refer to the Ordering Information.



R88M-K/R88D-KN□-ML2

System Configuration

Controllers (MECHATROLINK-II type)



Programmable Controller
SYSMAC CJ1



Position Control Unit
CJ1W-NC□71



Programmable Controller
SYSMAC CS1



Position Control Unit
CS1W-NC□71



Trajexia Machine Controller

Support Software

- CX-One FA Integrated Tool Package (Including CX-Programmer and CX-Position and CX-Motion)



Support Software

- CX-One FA Integrated Tool Package (Including CX-Drive)
- CX-Drive WS02-DRVC1



MECHATROLINK-II

MECHATROLINK-II Cables

(With ring core and USB connector on both ends)

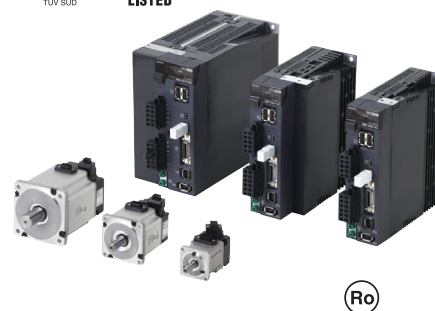
FNY-W6003-□□ (OMRON model number)

(Without ring core USB connector on both ends)

FNY-W6002-□□ (OMRON model number)

MECHATROLINK-II Repeater

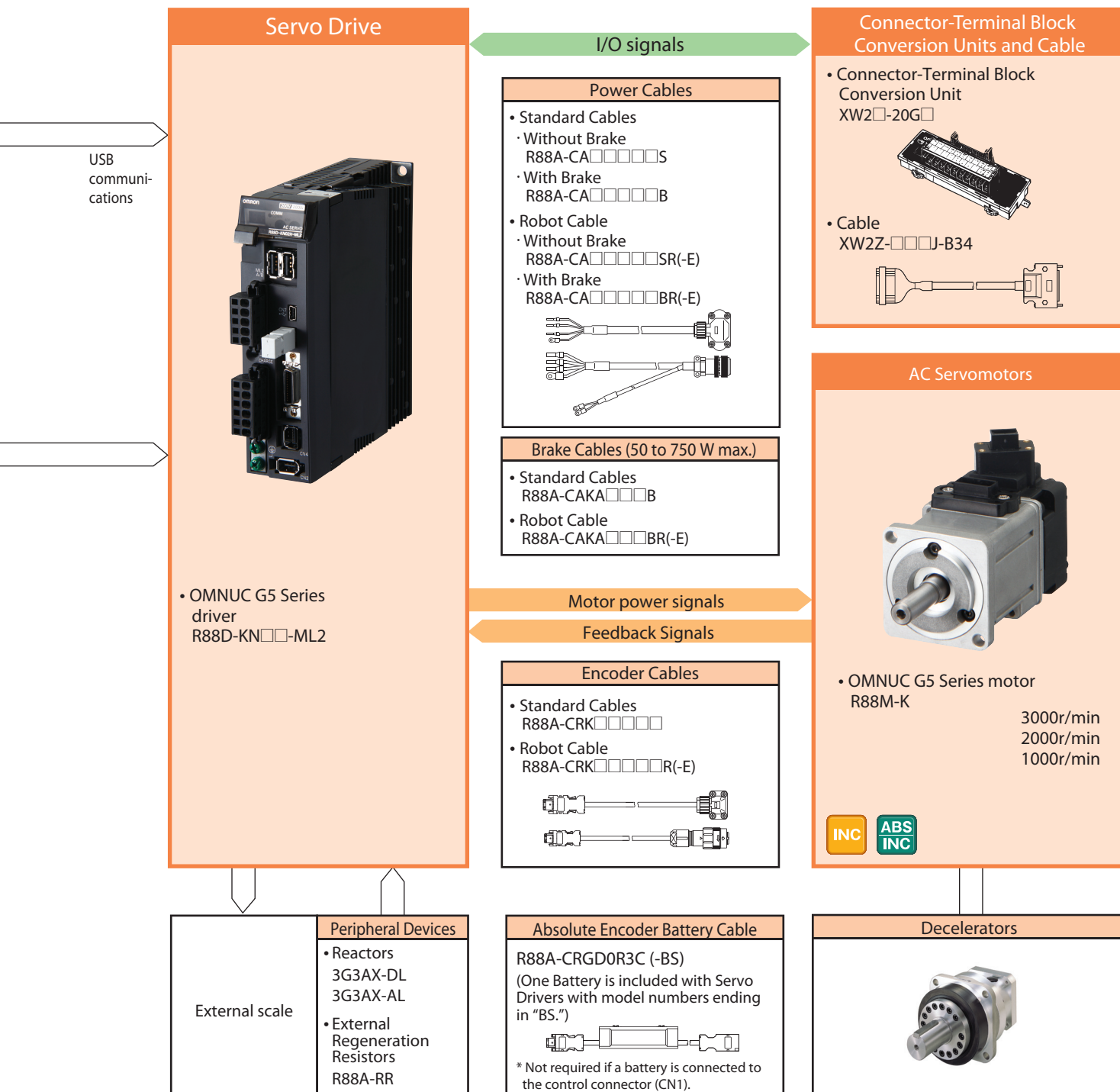
		Maximum transmission distance	
		0 to 30 m	30 to 50 m
Number of connected devices	1 to 15	Repeater not required.	Repeater not required.
	16	Repeater not required.	Repeater required.



High-Speed and High-Precision OMNUC G5 Series MECHATROLINK-II Communications with the Controller

- Data transfer using MECHATROLINK-II (See Note 1)
Communications:
All control data that can be interfaced between the Servo Driver and the Controller is transmitted using data communications. This enables maximizing the Servomotor performance without restricting the transmission performance of the control signals.
- Having a communications module built into the Servo Driver significantly saves space in the control panel.

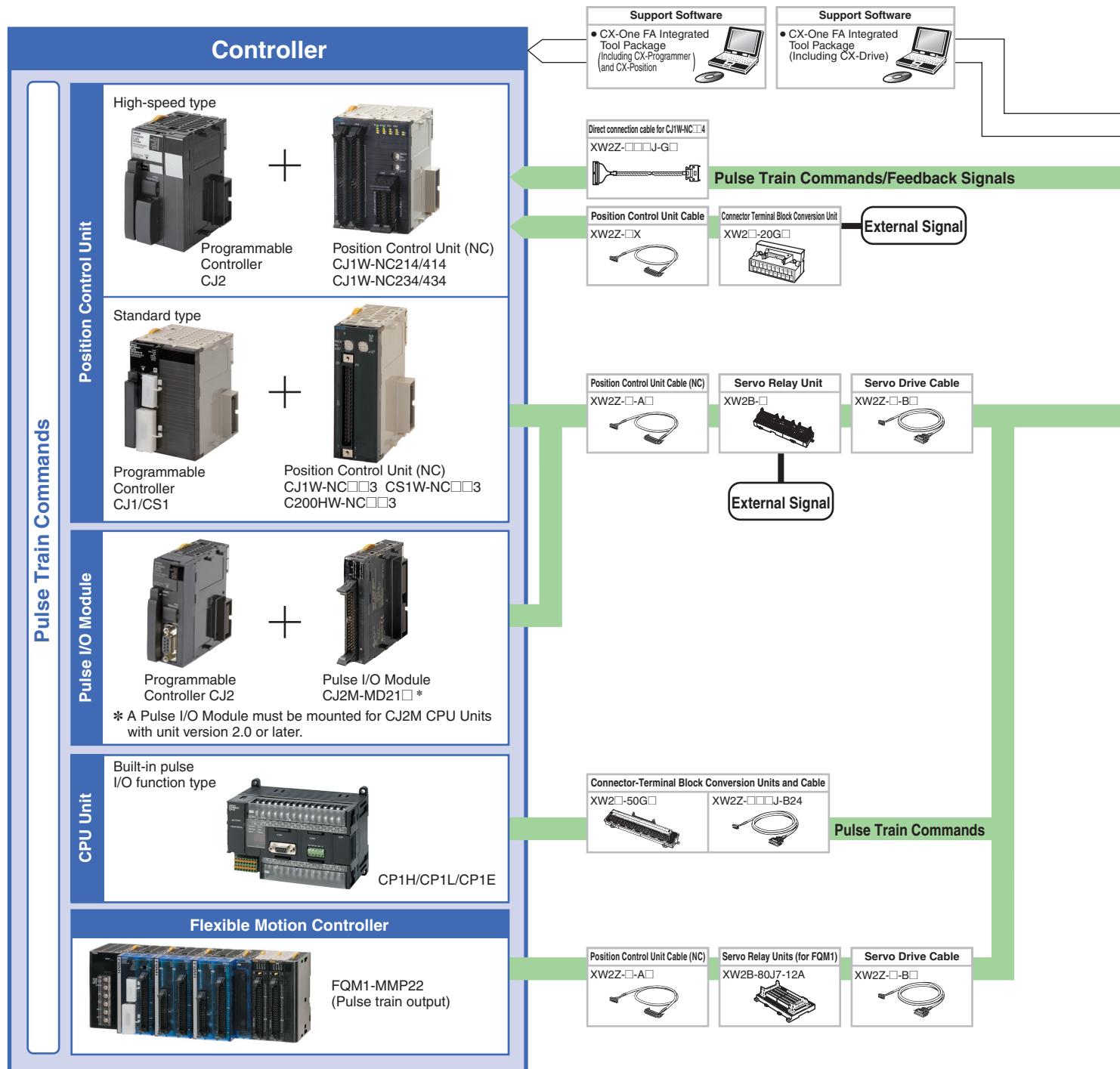
Note: 1. MECHATROLINK-II is a registered trademark of the MECHATROLINK Members Association.
2. CX-Drive (version 1.9) support for OMNUC G5-series Servo Drivers with MECHATROLINK-II Communications can be obtained from November, 2009.



G5-series Pulse Train Input Type AC Servomotors/Servo Drives

R88M-KE/R88D-KP

System Configuration



High-performance Servo Optimal for positioning Application.



- Industry Top-class Tracking Performance.
Speed Response Frequency of 2 kHz.
- Outstanding Positioning Accuracy.
Featuring a 20-bit high-resolution incremental encoder.
- Easy Adjustment with Autotuning Function.
- Ideal for Applications That Require High Accuracy.
Improved vibration control function.

USB
communications

Servo Drive



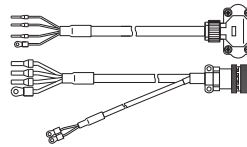
- G5-series Pulse Train Input Type Drives
R88D-KP

200 VAC

Motor power signals

Power Cables

- Non-flexible Cables
 - Without Brake
R88A-CAG□□□□S
 - With Brake
R88A-CAG□□□□B
- Flexible Cables
 - Without Brake
R88A-CAG□□□□SR
 - With Brake
R88A-CAG□□□□BR



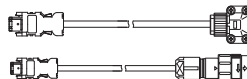
Brake Cables (50 to 750 W max.)

- Non-flexible Cables
R88A-CAGA□□□□B
- Flexible Cables
R88A-CAGA□□□□BR

Feedback Signals

Encoder Cables

- Non-Flexible Cables
R88A-CRG□□□□□
- Flexible Cables
R88A-CRG□□□□□R



Peripheral Devices

- Reactors
3G3AX-DL
3G3AX-AL
- External Regeneration Resistors
R88A-RR

AC Servomotors



- G5-series Pulse Train Input Type Motors
R88M-KE

3,000 r/min
2,000 r/min
1,000 r/min

INC

Decelerators



MEMO

MEMO

Ordering Information

Product name AC Servomotor/Drive
 OMNUC G5-series

Interpreting Model Numbers..... B-2

- Servo Drive Model Numbers
- Servomotor Model Numbers
- Understanding Decelerator Model Numbers
(Backlash = 3' Max./Backlash = 15' Max.)

Table of Servomotor Variations..... B-4

Ordering Information..... B-5

AC Servo Drives B-5

- EtherCAT Communications
- General-purpose Inputs
- MECHATROLINK-II Communications

Servomotors B-6

Decelerators (Backlash = 3' Max./Backlash = 15' Max.) B-11

Accessories and Cables..... B-13

- Connection Cables (Power Cables, Brake Cables, Encoder Cables)
(Standard Cables)
(Robot Cables)
- Cable/Connector
- Control Cables
 - For General-purpose Inputs
 - For MECHATROLINK-II Communications
 - For EtherCAT Communications
- Peripheral Devices
(External Regeneration Resistors, Reactors, Mounting Brackets)
- Support Software (CX-One/CX-Drive)

Combination table B-22

- Servo Drive and Servomotor Combinations
- Servomotor and Decelerator Combinations
- Controller Combinations
- Cable Combinations

About Manuals B-34

Read and Understand this Catalog

MECHATROLINK-II is a registered trademark of the MECHATROLINK Members Association.
EtherCAT® is a registered trademark of Beckhoff Automation GmbH.

Interpreting Model Numbers

Servo Drive Model Numbers

R88D-K N 01 H -ECT

(1) (2) (3) (4) (5)

No	Item	Symbol	Specifications
(1)	OMNUC G5-series Servo Drive		
(2)	Drive Type	T	Analog input/Pulse train input type
		N	Communication type
(3)	Maximum Applicable Servomotor Capacity	A5	50 W
		01	100 W
		02	200 W
		04	400 W
		06	600 W
		08	750 W
		10	1 W
		15	1.5 kW
		20	2 kW
		30	3 kW
		40	4 kW
		50	5 kW
		75	7.5 kW
		150	15 kW
(4)	Power Supply Voltage	L	100 VAC
		H	200 VAC
		F	400 VAC
(5)	Network type	Blank	General-purpose Inputs
		-ML2	MECHATROLINK-II Communications
		-ECT	EtherCAT Communications

Servomotor Model Numbers

R88M-K □ 750 30 H -BO S2

(1) (2) (3) (4) (5) (6)

No	Item	Symbol	Specifications
(1)	OMNUC G5-series Servomotor		
(2)	Motor Type	Blank	Cylinder type
		—	—
(3)	Servomotor Capacity	050	50 W
		100	100 W
		200	200 W
		400	400 W
		600	600 W
		750	750 W
		900	900 W
		1K0	1 kW
		1K5	1.5 kW
		2K0	2 kW
		3K0	3 kW
		4K0	4 kW
		4K5	4.5 kW
		5K0	5 kW
		6K0	6 kW
		7K5	7.5 kW
		11K0	11 kW
		15K0	15 kW
(4)	Rated Rotation Speed	10	1,000 r/min
		15	1,500 r/min
		20	2,000 r/min
		30	3,000 r/min
(5)	Applied Voltage	F	400 VAC (with incremental encoder specifications) INC
		H	200 VAC (with incremental encoder specifications) INC
		L	100 VAC (with incremental encoder specifications) INC
		C	400 VAC (with absolute encoder specifications) ABS/INC
		T	200VAC (with absolute encoder specifications) ABS/INC
		S	100 VAC (with absolute encoder specifications) ABS/INC
(6)	Option	Blank	Straight shaft
		B	With brake
		O	With oil seal
		S2	With key and tap

Note: **INC** incremental encoder: 20bit
ABS/INC incremental encoder: 17bit, absolute encoder: 17bit

Understanding Decelerator Model Numbers (Backlash = 3' Max./Backlash = 15' Max.)

Backlash = 3' Max.

R88G-HPG 14A 05 100 S B J

(1) (2) (3) (4) (5) (6) (7)

No	Item	Symbol	Specifications
(1)	Decelerator for G□-Series Servomotors Backlash = 3' Max.		
(2)	Flange Size Number	11B	□40
		14A	□60
		20A	□90
		32A	□120
		50A	□170
		65A	□230
(3)	Gear Ratio	05	1/5
		09	1/9 (only frame number 11B)
		11	1/11 (except frame number 65A)
		12	1/12 (only frame number 65A)
		20	1/20 (only frame number 65A)
		21	1/21 (except frame number 65A)
		25	1/25 (only frame number 65A)
		33	1/33
		45	1/45
(4)	Applicable Servomotor Capacity	050	50 W
		100	100 W
		200	200 W
		400	400 W
		750	750 W
		900	900 W
		1K0	1 kW
		1K5	1.5 kW
		2K0	2 kW
		3K0	3 kW
		4K0	4 kW
		4K5	4.5 kW
		5K0	5 kW
(5)	Motor Type	Blank	3,000-r/min cylindrical servomotors
		—	—
		S	2,000-r/min cylindrical servomotors
		T	1,000-r/min cylindrical servomotors
(6)	Backlash	B	Backlash = 3' Max
(7)	Option	Blank	Straight shaft
		J	With key and tap

Backlash = 15' Max.

R88G-VRSF 09 B 100 C J

(1) (2) (3) (4) (5) (6) (7)

No	Item	Symbol	Specifications
(1)	Decelerator for G□-Series Servomotors Backlash = 15' Max.		
(2)	Gear Ratio	05	1/5
		09	1/9
		15	1/15
		25	1/25
(3)	Flange Size Number	B	□52
		C	□78
		D	□98
(4)	Applicable Servomotor Capacity	050	50 W
		100	100 W
		200	200 W
		400	400 W
		750	750 W
(5)	Motor Type	Blank	3,000-r/min cylindrical servomotors
		—	—
(6)	Backlash	C	Backlash = 15' Max
(7)	Option	J	With key (without tap)

Table of Servomotor Variations

R88M-K□□□□□□-□□□□
(3) (4) (5) (6) (7) (8) (9)

(3) Type	(4) Applicable Servomotor Capacity	(5) Rotation speed	Model	(6) Applied Voltage						(7) With brake / Without brake		(8) Models with oil seals		(9) Shaft type	
				INC	INC	INC	ABS	ABS	ABS	—	B	Blank	O	Blank	S2
				400	200	100	400	200	100						
				F	H	L	C	T	S	Blank	With brake	Blank	O	Blank	S2
Cylinder	50 W	3,000 r/min	R88M-K05030 *1		√			√		√	√	√	√	√	√
	100 W		R88M-K10030		√	√		√	√	√	√	√	√	√	√
	200 W		R88M-K20030		√	√		√	√	√	√	√	√	√	√
	400 W		R88M-K40030		√	√		√	√	√	√	√	√	√	√
	750 W		R88M-K75030	√	√		√	√		√	√	√	√	√	√
	1 kW		R88M-K1K030	√	√		√	√		√	√	√	√	√	√
	1.5 kW		R88M-K1K530	√	√		√	√		√	√	√	√	√	√
	2 kW		R88M-K2K030	√	√		√	√		√	√	√	√	√	√
	3 kW		R88M-K3K030	√	√		√	√		√	√	√	√	√	√
	4 kW		R88M-K4K030	√	√		√	√		√	√	√	√	√	√
	5 kW		R88M-K5K030	√	√		√	√		√	√	√	√	√	√
	400 W	2,000 r/min	R88M-K40020	√			√			√	√	√	√	√	√
	600 W		R88M-K60020	√			√			√	√	√	√	√	√
	1 kW		R88M-K1K020	√	√		√	√		√	√	√	√	√	√
	1.5 kW		R88M-K1K520	√	√		√	√		√	√	√	√	√	√
	2 kW		R88M-K2K020	√	√		√	√		√	√	√	√	√	√
	3 kW		R88M-K3K020	√	√		√	√		√	√	√	√	√	√
	4 kW		R88M-K4K020	√	√		√	√		√	√	√	√	√	√
	5 kW		R88M-K5K020	√	√		√	√		√	√	√	√	√	√
	7.5 kW		R88M-K7K515 *2				√	√		√	√	√	√	√	√
	11 kW		R88M-K11K015 *2				√	√		√	√	√	√	√	√
	15 kW		R88M-K15K015 *2				√	√		√	√	√	√	√	√
	900 W	1,000 r/min	R88M-K90010	√	√		√	√		√	√	√	√	√	√
	2 kW		R88M-K2K010	√	√		√	√		√	√	√	√	√	√
	3 kW		R88M-K3K010	√	√		√	√		√	√	√	√	√	√
	4.5 kW		R88M-K4K510				√	√		√	√	√	√	√	√
	6 kW		R88M-K6K010				√	√		√	√	√	√	√	√
Blank: Cylinder type	example 030: 30 W 100: 100 W 1K0: 1 kW	10: 1,000 r/min 20: 2,000 r/min 30: 3,000 r/min		F: 400 VAC (with incremental encoder) INC H: 200 VAC (with incremental encoder) INC L: 100 VAC (with incremental encoder) INC C: 400 VAC (with absolute encoder) ABS/INC T: 200 VAC (with absolute encoder) ABS/INC S: 100 VAC (with absolute encoder) ABS/INC						Blank: Without brake B: 24 VDC With brake		Blank: Without oil seals O: With oil seals		Blank: Straight shaft S2: With key and tap	

*1. R88M-K05030H-□, R88M-K05030T-□, can be used for Power Supply Voltage of 100/200VAC.

*2. The rated speed is 1,500 r/min.

Ordering Information

AC Servo Drives

EtherCAT Communications *NEW*

Specifications		Model
Power Model Supply Voltage	Applicable Servomotor Capacity	
Single-phase 100 VAC	50 W	R88D-KNA5L-ECT
	100 W	R88D-KN01L-ECT
	200 W	R88D-KN02L-ECT
	400 W	R88D-KN04L-ECT
Single-phase/three-phase 200 VAC	100 W	R88D-KN01H-ECT
	200 W	R88D-KN02H-ECT
	400 W	R88D-KN04H-ECT
	750 W	R88D-KN08H-ECT
	1 kW	R88D-KN10H-ECT
	1.5 kW	R88D-KN15H-ECT
Three-phase 200 VAC	2 kW	R88D-KN20H-ECT
	3 kW	R88D-KN30H-ECT
	5 kW	R88D-KN50H-ECT
	7.5 kW	R88D-KN75H-ECT
	15 kW	R88D-KN150H-ECT
Three-phase 400 VAC	600 W	R88D-KN06F-ECT
	1 kW	R88D-KN10F-ECT
	1.5 kW	R88D-KN15F-ECT
	2 kW	R88D-KN20F-ECT
	3 kW	R88D-KN30F-ECT
	5 kW	R88D-KN50F-ECT
	7.5 kW	R88D-KN75F-ECT
	15 kW	R88D-KN150F-ECT

MECHATROLINK-II Communications

Specifications		Model
Power Supply Voltage	Applicable Servomotor Capacity	
Single-phase 100 VAC	50 W	R88D-KNA5L-ML2
	100 W	R88D-KN01L-ML2
	200 W	R88D-KN02L-ML2
	400 W	R88D-KN04L-ML2
Single-phase/three-phase 200 VAC	100 W	R88D-KN01H-ML2
	200 W	R88D-KN02H-ML2
	400 W	R88D-KN04H-ML2
	750 W	R88D-KN08H-ML2
	1 kW	R88D-KN10H-ML2
	1.5 kW	R88D-KN15H-ML2
Three-phase 200 VAC	2 kW	R88D-KN20H-ML2
	3 kW	R88D-KN30H-ML2
	5 kW	R88D-KN50H-ML2
Three-phase 400 VAC	600 W	R88D-KN06F-ML2
	1 kW	R88D-KN10F-ML2
	1.5 kW	R88D-KN15F-ML2
	2 kW	R88D-KN20F-ML2
	3 kW	R88D-KN30F-ML2
	5 kW	R88D-KN50F-ML2

General-purpose Inputs (Analog input/Pulse train input type)

Specifications		Model
Power Supply Voltage	Applicable Servomotor Capacity	
Single-phase 100 VAC	50 W	R88D-KTA5L
	100 W	R88D-KT01L
	200 W	R88D-KT02L
	400 W	R88D-KT04L
Single-phase/three-phase 200 VAC	100 W	R88D-KT01H
	200 W	R88D-KT02H
	400 W	R88D-KT04H
	750 W	R88D-KT08H
	1 kW	R88D-KT10H
	1.5 kW	R88D-KT15H
Three-phase 200 VAC	2 kW	R88D-KT20H
	3 kW	R88D-KT30H
	5 kW	R88D-KT50H
	7.5 kW	R88D-KT75H <i>NEW</i>
	15 kW	R88D-KT150H <i>NEW</i>
Three-phase 400 VAC	600 W	R88D-KT06F
	1 kW	R88D-KT10F
	1.5 kW	R88D-KT15F
	2 kW	R88D-KT20F
	3 kW	R88D-KT30F
	5 kW	R88D-KT50F
	7.5 kW	R88D-KT75F <i>NEW</i>
	15 kW	R88D-KT150F <i>NEW</i>

Servomotors

<Cylinder Type>
● 3,000-r/min servomotors

Rotation speed	Encoder	Option
3,000 r/min	INC	Without key
	ABS/INC	With key

Specifications			Model
			With incremental encoder
			Straight shaft without key
	Voltage	Rated output	Without oil seals
Without brake	100 V	50 W	R88M-K05030H
		100 W	R88M-K10030L
		200 W	R88M-K20030L
		400 W	R88M-K40030L
	200 V	50 W	R88M-K05030H
		100 W	R88M-K10030H
		200 W	R88M-K20030H
		400 W	R88M-K40030H
		750 W	R88M-K75030H
		1 kW	R88M-K1K030H
		1.5 kW	R88M-K1K530H
		2 kW	R88M-K2K030H
		3 kW	R88M-K3K030H
		4 kW	R88M-K4K030H
		5 kW	R88M-K5K030H
	400 V	750 W	R88M-K75030F
		1 kW	R88M-K1K030F
		1.5 kW	R88M-K1K530F
		2 kW	R88M-K2K030F
		3 kW	R88M-K3K030F
With brake	100 V	50 W	R88M-K05030H-B
		100 W	R88M-K10030L-B
		200 W	R88M-K20030L-B
		400 W	R88M-K40030L-B
	200 V	50 W	R88M-K05030H-B
		100 W	R88M-K10030H-B
		200 W	R88M-K20030H-B
		400 W	R88M-K40030H-B
		750 W	R88M-K75030H-B
		1 kW	R88M-K1K030H-B
		1.5 kW	R88M-K1K530H-B
		2 kW	R88M-K2K030H-B
		3 kW	R88M-K3K030H-B
		4 kW	R88M-K4K030H-B
		5 kW	R88M-K5K030H-B
	400 V	750 W	R88M-K75030F-B
		1 kW	R88M-K1K030F-B
		1.5 kW	R88M-K1K530F-B
		2 kW	R88M-K2K030F-B
		3 kW	R88M-K3K030F-B

Note: Models with oil seals are also available.

Rotation speed	Encoder	Option
3,000 r/min	INC	Without key
	ABS/INC	With key

Specifications			Model
			With incremental encoder
			Straight shaft with key and tap
	Voltage	Rated output	Without oil seals
Without brake	100 V	50 W	R88M-K05030H-S2
		100 W	R88M-K10030L-S2
		200 W	R88M-K20030L-S2
		400 W	R88M-K40030L-S2
	200 V	50 W	R88M-K05030H-S2
		100 W	R88M-K10030H-S2
		200 W	R88M-K20030H-S2
		400 W	R88M-K40030H-S2
		750 W	R88M-K75030H-S2
		1 kW	R88M-K1K030H-S2
		1.5 kW	R88M-K1K530H-S2
		2 kW	R88M-K2K030H-S2
		3 kW	R88M-K3K030H-S2
		4 kW	R88M-K4K030H-S2
		5 kW	R88M-K5K030H-S2
	400 V	750 W	R88M-K75030F-S2
		1 kW	R88M-K1K030F-S2
		1.5 kW	R88M-K1K530F-S2
		2 kW	R88M-K2K030F-S2
		3 kW	R88M-K3K030F-S2
With brake	100 V	50 W	R88M-K05030H-BS2
		100 W	R88M-K10030L-BS2
		200 W	R88M-K20030L-BS2
		400 W	R88M-K40030L-BS2
	200 V	50 W	R88M-K05030H-BS2
		100 W	R88M-K10030H-BS2
		200 W	R88M-K20030H-BS2
		400 W	R88M-K40030H-BS2
		750 W	R88M-K75030H-BS2
		1 kW	R88M-K1K030H-BS2
		1.5 kW	R88M-K1K530H-BS2
		2 kW	R88M-K2K030H-BS2
		3 kW	R88M-K3K030H-BS2
		4 kW	R88M-K4K030H-BS2
		5 kW	R88M-K5K030H-BS2
	400 V	750 W	R88M-K75030F-BS2
		1 kW	R88M-K1K030F-BS2
		1.5 kW	R88M-K1K530F-BS2
		2 kW	R88M-K2K030F-BS2
		3 kW	R88M-K3K030F-BS2

Note: Models with oil seals are also available.

Rotation speed	Encoder	Option
3,000 r/min	INC	Without key
	ABS/INC	With key

Specifications			Model
			With absolute encoder
			Straight shaft without key
	Voltage	Rated output	Without oil seals
Without brake	100 V	50 W	R88M-K05030T
		100 W	R88M-K10030S
		200 W	R88M-K20030S
		400 W	R88M-K40030S
	200 V	50 W	R88M-K05030T
		100 W	R88M-K10030T
		200 W	R88M-K20030T
		400 W	R88M-K40030T
		750 W	R88M-K75030T
		1 kW	R88M-K1K030T
		1.5 kW	R88M-K1K530T
		2 kW	R88M-K2K030T
		3 kW	R88M-K3K030T
		4 kW	R88M-K4K030T
		5 kW	R88M-K5K030T
	400 V	750 W	R88M-K75030C
		1 kW	R88M-K1K030C
		1.5 kW	R88M-K1K530C
		2 kW	R88M-K2K030C
		3 kW	R88M-K3K030C
		4 kW	R88M-K4K030C
		5 kW	R88M-K5K030C
	With brake	100 V	50 W R88M-K05030T-B
			100 W R88M-K10030S-B
			200 W R88M-K20030S-B
			400 W R88M-K40030S-B
		200 V	50 W R88M-K05030T-B
			100 W R88M-K10030T-B
			200 W R88M-K20030T-B
			400 W R88M-K40030T-B
			750 W R88M-K75030T-B
			1 kW R88M-K1K030T-B
			1.5 kW R88M-K1K530T-B
			2 kW R88M-K2K030T-B
			3 kW R88M-K3K030T-B
			4 kW R88M-K4K030T-B
			5 kW R88M-K5K030T-B
		400 V	750 W R88M-K75030C-B
			1 kW R88M-K1K030C-B
			1.5 kW R88M-K1K530C-B
			2 kW R88M-K2K030C-B
			3 kW R88M-K3K030C-B
			4 kW R88M-K4K030C-B
			5 kW R88M-K5K030C-B

Note: Models with oil seals are also available.

Rotation speed	Encoder	Option
3,000 r/min	INC	Without key
	ABS/INC	With key

Specifications			Model
			With absolute encoder
			Straight shaft withkey and tap
	Voltage	Rated output	Without oil seals
Without brake	100 V	50 W	R88M-K05030T-S2
		100 W	R88M-K10030S-S2
		200 W	R88M-K20030S-S2
		400 W	R88M-K40030S-S2
	200 V	50 W	R88M-K05030T-S2
		100 W	R88M-K10030T-S2
		200 W	R88M-K20030T-S2
		400 W	R88M-K40030T-S2
		750 W	R88M-K75030T-S2
		1 kW	R88M-K1K030T-S2
		1.5 kW	R88M-K1K530T-S2
		2 kW	R88M-K2K030T-S2
		3 kW	R88M-K3K030T-S2
		4 kW	R88M-K4K030T-S2
		5 kW	R88M-K5K030T-S2
	400 V	750 W	R88M-K75030C-S2
		1 kW	R88M-K1K030C-S2
		1.5 kW	R88M-K1K530C-S2
		2 kW	R88M-K2K030C-S2
		3 kW	R88M-K3K030C-S2
		4 kW	R88M-K4K030C-S2
		5 kW	R88M-K5K030C-S2
	With brake	100 V	50 W R88M-K05030T-BS2
			100 W R88M-K10030S-BS2
			200 W R88M-K20030S-BS2
			400 W R88M-K40030S-BS2
		200 V	50 W R88M-K05030T-BS2
			100 W R88M-K10030T-BS2
			200 W R88M-K20030T-BS2
			400 W R88M-K40030T-BS2
			750 W R88M-K75030T-BS2
			1 kW R88M-K1K030T-BS2
			1.5 kW R88M-K1K530T-BS2
			2 kW R88M-K2K030T-BS2
			3 kW R88M-K3K030T-BS2
			4 kW R88M-K4K030T-BS2
			5 kW R88M-K5K030T-BS2
		400 V	750 W R88M-K75030C-BS2
			1 kW R88M-K1K030C-BS2
			1.5 kW R88M-K1K530C-BS2
			2 kW R88M-K2K030C-BS2
			3 kW R88M-K3K030C-BS2
			4 kW R88M-K4K030C-BS2
			5 kW R88M-K5K030C-BS2

Note: Models with oil seals are also available.

AC Servomotor/Drive
OMNUC G5-series

● 2,000-r/min servomotors

Rotation speed	Encoder	Option
2,000 r/min	INC	Without key
	ABS/INC	With key

Specifications			Model
			With incremental encoder
			Straight shaft without key
	Voltage	Rated output	Without oil seals
Without brake	200 V	1 kW	R88M-K1K020H
		1.5 kW	R88M-K1K520H
		2 kW	R88M-K2K020H
		3 kW	R88M-K3K020H
		4 kW	R88M-K4K020H
		5 kW	R88M-K5K020H
	400 V	400 W	R88M-K40020F
		600 W	R88M-K60020F
		1 kW	R88M-K1K020F
		1.5 kW	R88M-K1K520F
		2 kW	R88M-K2K020F
		3 kW	R88M-K3K020F
		4 kW	R88M-K4K020F
		5 kW	R88M-K5K020F
With brake	200 V	1 kW	R88M-K1K020H-B
		1.5 kW	R88M-K1K520H-B
		2 kW	R88M-K2K020H-B
		3 kW	R88M-K3K020H-B
		4 kW	R88M-K4K020H-B
		5 kW	R88M-K5K020H-B
	400 V	400 W	R88M-K40020F-B
		600 W	R88M-K60020F-B
		1 kW	R88M-K1K020F-B
		1.5 kW	R88M-K1K520F-B
		2 kW	R88M-K2K020F-B
		3 kW	R88M-K3K020F-B
		4 kW	R88M-K4K020F-B
		5 kW	R88M-K5K020F-B

Note: Models with oil seals are also available.

Rotation speed	Encoder	Option
2,000 r/min	INC	Without key
	ABS/INC	With key

Specifications			Model
			With incremental encoder
			Straight shaft with key and tap
	Voltage	Rated output	Without oil seals
Without brake	200 V	1 kW	R88M-K1K020H-S2
		1.5 kW	R88M-K1K520H-S2
		2 kW	R88M-K2K020H-S2
		3 kW	R88M-K3K020H-S2
		4 kW	R88M-K4K020H-S2
		5 kW	R88M-K5K020H-S2
	400 V	400 W	R88M-K40020F-S2
		600 W	R88M-K60020F-S2
		1 kW	R88M-K1K020F-S2
		1.5 kW	R88M-K1K520F-S2
		2 kW	R88M-K2K020F-S2
		3 kW	R88M-K3K020F-S2
		4 kW	R88M-K4K020F-S2
		5 kW	R88M-K5K020F-S2
With brake	200 V	1 kW	R88M-K1K020H-BS2
		1.5 kW	R88M-K1K520H-BS2
		2 kW	R88M-K2K020H-BS2
		3 kW	R88M-K3K020H-BS2
		4 kW	R88M-K4K020H-BS2
		5 kW	R88M-K5K020H-BS2
	400 V	400 W	R88M-K40020F-BS2
		600 W	R88M-K60020F-BS2
		1 kW	R88M-K1K020F-BS2
		1.5 kW	R88M-K1K520F-BS2
		2 kW	R88M-K2K020F-BS2
		3 kW	R88M-K3K020F-BS2
		4 kW	R88M-K4K020F-BS2
		5 kW	R88M-K5K020F-BS2

Note: Models with oil seals are also available.

Rotation speed	Encoder	Option
2,000 r/min	INC	Without key
	ABS/INC	With key

Specifications			Model
			With absolute encoder
			Straight shaft without key
	Voltage	Rated output	Without oil seals
Without brake	200 V	1 kW	R88M-K1K020T
		1.5 kW	R88M-K1K520T
		2 kW	R88M-K2K020T
		3 kW	R88M-K3K020T
		4 kW	R88M-K4K020T
		5 kW	R88M-K5K020T
		7.5 kW	R88M-K7K515T * <i>NEW</i>
		11 kW	R88M-K11K015T * <i>NEW</i>
		15 kW	R88M-K15K015T * <i>NEW</i>
	400 V	400 W	R88M-K40020C
		600 W	R88M-K60020C
		1 kW	R88M-K1K020C
		1.5 kW	R88M-K1K520C
		2 kW	R88M-K2K020C
		3 kW	R88M-K3K020C
		4 kW	R88M-K4K020C
		5 kW	R88M-K5K020C
		7.5 kW	R88M-K7K515C * <i>NEW</i>
		11 kW	R88M-K11K015C * <i>NEW</i>
		15 kW	R88M-K15K015C * <i>NEW</i>
With brake	200 V	1 kW	R88M-K1K020T-B
		1.5 kW	R88M-K1K520T-B
		2 kW	R88M-K2K020T-B
		3 kW	R88M-K3K020T-B
		4 kW	R88M-K4K020T-B
		5 kW	R88M-K5K020T-B
		7.5 kW	R88M-K7K515T-B * <i>NEW</i>
		11 kW	R88M-K11K015T-B * <i>NEW</i>
		15 kW	R88M-K15K015T-B * <i>NEW</i>
	400 V	400 W	R88M-K40020C-B
		600 W	R88M-K60020C-B
		1 kW	R88M-K1K020C-B
		1.5 kW	R88M-K1K520C-B
		2 kW	R88M-K2K020C-B
		3 kW	R88M-K3K020C-B
		4 kW	R88M-K4K020C-B
		5 kW	R88M-K5K020C-B
		7.5 kW	R88M-K7K515C-B * <i>NEW</i>
		11 kW	R88M-K11K015C-B * <i>NEW</i>
		15 kW	R88M-K15K015C-B * <i>NEW</i>

Note: Models with oil seals are also available.

* The rated speed is 1,500 r/min.

Rotation speed	Encoder	Option
2,000 r/min	INC	Without key
	ABS/INC	With key

Specifications			Model
			With absolute encoder
			Straight shaft with key and tap
	Voltage	Rated output	Without oil seals
Without brake	200 V	1 kW	R88M-K1K020T-S2
		1.5 kW	R88M-K1K520T-S2
		2 kW	R88M-K2K020T-S2
		3 kW	R88M-K3K020T-S2
		4 kW	R88M-K4K020T-S2
		5 kW	R88M-K5K020T-S2
		7.5 kW	R88M-K7K515T-S2 * <i>NEW</i>
		11 kW	R88M-K11K015T-S2 * <i>NEW</i>
		15 kW	R88M-K15K015T-S2 * <i>NEW</i>
	400 V	400 W	R88M-K40020C-S2
		600 W	R88M-K60020C-S2
		1 kW	R88M-K1K020C-S2
		1.5 kW	R88M-K1K520C-S2
		2 kW	R88M-K2K020C-S2
		3 kW	R88M-K3K020C-S2
		4 kW	R88M-K4K020C-S2
		5 kW	R88M-K5K020C-S2
		7.5 kW	R88M-K7K515C-S2 * <i>NEW</i>
		11 kW	R88M-K11K015C-S2 * <i>NEW</i>
		15 kW	R88M-K15K015C-S2 * <i>NEW</i>
With brake	200 V	1 kW	R88M-K1K020T-BS2
		1.5 kW	R88M-K1K520T-BS2
		2 kW	R88M-K2K020T-BS2
		3 kW	R88M-K3K020T-BS2
		4 kW	R88M-K4K020T-BS2
		5 kW	R88M-K5K020T-BS2
		7.5 kW	R88M-K7K515T-BS2 * <i>NEW</i>
		11 kW	R88M-K11K015T-BS2 * <i>NEW</i>
		15 kW	R88M-K15K015T-BS2 * <i>NEW</i>
	400 V	400 W	R88M-K40020C-BS2
		600 W	R88M-K60020C-BS2
		1 kW	R88M-K1K020C-BS2
		1.5 kW	R88M-K1K520C-BS2
		2 kW	R88M-K2K020C-BS2
		3 kW	R88M-K3K020C-BS2
		4 kW	R88M-K4K020C-BS2
		5 kW	R88M-K5K020C-BS2
		7.5 kW	R88M-K7K515C-BS2 * <i>NEW</i>
		11 kW	R88M-K11K015C-BS2 * <i>NEW</i>
		15 kW	R88M-K15K015C-BS2 * <i>NEW</i>

Note: Models with oil seals are also available.

* The rated speed is 1,500 r/min.

AC Servomotor/Drive OMNUC G5-series

● 1,000-r/min servomotors

Rotation speed	Encoder	Option
1,000 r/min	INC	Without key
	ABS/INC	With key

Specifications			Model
			With incremental encoder
			Straight shaft without key
	Voltage	Rated output	Without oil seals
Without brake	200 V	900 W	R88M-K90010H
		2 kW	R88M-K2K010H
		3 kW	R88M-K3K010H
	400 V	900 W	R88M-K90010F
		2 kW	R88M-K2K010F
		3 kW	R88M-K3K010F
With brake	200 V	900 W	R88M-K90010H-B
		2 kW	R88M-K2K010H-B
		3 kW	R88M-K3K010H-B
	400 V	900 W	R88M-K90010F-B
		2 kW	R88M-K2K010F-B
		3 kW	R88M-K3K010F-B

Note: Models with oil seals are also available.

Rotation speed	Encoder	Option
1,000 r/min	INC	Without key
	ABS/INC	With key

Specifications			Model
			With incremental encoder
			Straight shaft with key and tap
	Voltage	Rated output	Without oil seals
Without brake	200 V	900 W	R88M-K90010H-S2
		2 kW	R88M-K2K010H-S2
		3 kW	R88M-K3K010H-S2
	400 V	900 W	R88M-K90010F-S2
		2 kW	R88M-K2K010F-S2
		3 kW	R88M-K3K010F-S2
With brake	200 V	900 W	R88M-K90010H-BS2
		2 kW	R88M-K2K010H-BS2
		3 kW	R88M-K3K010H-BS2
	400 V	900 W	R88M-K90010F-BS2
		2 kW	R88M-K2K010F-BS2
		3 kW	R88M-K3K010F-BS2

Note: Models with oil seals are also available.

Rotation speed	Encoder	Option
1,000 r/min	INC	Without key
	ABS/INC	With key

Specifications			Model
			With absolute encoder
			Straight shaft without key
	Voltage	Rated output	Without oil seals
Without brake	200 V	900 W	R88M-K90010T
		2 kW	R88M-K2K010T
		3 kW	R88M-K3K010T
		4.5 kW	R88M-K4K510T <i>NEW</i>
		6 kW	R88M-K6K010T <i>NEW</i>
	400 V	900 W	R88M-K90010C
		2 kW	R88M-K2K010C
		3 kW	R88M-K3K010C
		4.5 kW	R88M-K4K510C <i>NEW</i>
		6 kW	R88M-K6K010C <i>NEW</i>
With brake	200 V	900 W	R88M-K90010T-B
		2 kW	R88M-K2K010T-B
		3 kW	R88M-K3K010T-B
		4.5 kW	R88M-K4K510T-B <i>NEW</i>
		6 kW	R88M-K6K010T-B <i>NEW</i>
	400 V	900 W	R88M-K90010C-B
		2 kW	R88M-K2K010C-B
		3 kW	R88M-K3K010C-B
		4.5 kW	R88M-K4K510C-B <i>NEW</i>
		6 kW	R88M-K6K010C-B <i>NEW</i>

Note: Models with oil seals are also available.

Rotation speed	Encoder	Option
1,000 r/min	INC	Without key
	ABS/INC	With key

Specifications			Model
			With absolute encoder
			Straight shaft with key and tap
	Voltage	Rated output	Without oil seals
Without brake	200 V	900 W	R88M-K90010T-S2
		2 kW	R88M-K2K010T-S2
		3 kW	R88M-K3K010T-S2
		4.5 kW	R88M-K4K510T-S2 <i>NEW</i>
		6 kW	R88M-K6K010T-S2 <i>NEW</i>
	400 V	900 W	R88M-K90010C-S2
		2 kW	R88M-K2K010C-S2
		3 kW	R88M-K3K010C-S2
		4.5 kW	R88M-K4K510C-S2 <i>NEW</i>
		6 kW	R88M-K6K010C-S2 <i>NEW</i>
With brake	200 V	900 W	R88M-K90010T-BS2
		2 kW	R88M-K2K010T-BS2
		3 kW	R88M-K3K010T-BS2
		4.5 kW	R88M-K4K510T-BS2 <i>NEW</i>
		6 kW	R88M-K6K010T-BS2 <i>NEW</i>
	400 V	900 W	R88M-K90010C-BS2
		2 kW	R88M-K2K010C-BS2
		3 kW	R88M-K3K010C-BS2
		4.5 kW	R88M-K4K510C-BS2 <i>NEW</i>
		6 kW	R88M-K6K010C-BS2 <i>NEW</i>

Note: Models with oil seals are also available.

Decelerators (Backlash = 3' Max./Backlash = 15' Max.)

Backlash = 3' Max
<Cylinder Type>

● 3,000-r/min servomotors

Straight shaft without key

Motor capacity	Gear Ratio	Model (Straight shaft)
50 W	1/5	R88G-HPG11B05100B
	1/9	R88G-HPG11B09050B
	1/21	R88G-HPG14A21100B
	1/33	R88G-HPG14A33050B
	1/45	R88G-HPG14A45050B
100 W	1/5	R88G-HPG11B05100B
	1/11	R88G-HPG14A11100B
	1/21	R88G-HPG14A21100B
	1/33	R88G-HPG20A33100B
	1/45	R88G-HPG20A45100B
200 W	1/5	R88G-HPG14A05200B
	1/11	R88G-HPG14A11200B
	1/21	R88G-HPG20A21200B
	1/33	R88G-HPG20A33200B
	1/45	R88G-HPG20A45200B
400 W	1/5	R88G-HPG14A05400B
	1/11	R88G-HPG20A11400B
	1/21	R88G-HPG20A21400B
	1/33	R88G-HPG32A33400B
	1/45	R88G-HPG32A45400B
750 W (200 V)	1/5	R88G-HPG20A05750B
	1/11	R88G-HPG20A11750B
	1/21	R88G-HPG32A21750B
	1/33	R88G-HPG32A33750B
	1/45	R88G-HPG32A45750B
750W (400 V)	1/5	R88G-HPG32A052K0B
	1/11	R88G-HPG32A112K0B
	1/21	R88G-HPG32A211K5B
	1/33	R88G-HPG32A33600SB
	1/45	R88G-HPG50A451K5B
1kW	1/5	R88G-HPG32A052K0B
	1/11	R88G-HPG32A112K0B
	1/21	R88G-HPG32A211K5B
	1/33	R88G-HPG50A332K0B
	1/45	R88G-HPG50A451K5B
1.5kW	1/5	R88G-HPG32A052K0B
	1/11	R88G-HPG32A112K0B
	1/21	R88G-HPG32A211K5B
	1/33	R88G-HPG50A332K0B
	1/45	R88G-HPG50A451K5B
2kW	1/5	R88G-HPG32A052K0B
	1/11	R88G-HPG32A112K0B
	1/21	R88G-HPG50A212K0B
	1/33	R88G-HPG50A332K0B
	1/45	R88G-HPG50A451K5B
3kW	1/5	R88G-HPG32A053K0B
	1/11	R88G-HPG50A113K0B
	1/21	R88G-HPG50A213K0B
4kW	1/5	R88G-HPG32A054K0B
	1/11	R88G-HPG50A115K0B
5kW	1/5	R88G-HPG50A055K0B
	1/11	R88G-HPG50A115K0B

Note: 1. The standard models have a straight shaft.
2. To order a Servomotor with a straight shaft with key, add "J" to the end of the model number, in the place indicated by the box.

● 2,000-r/min servomotors

Straight shaft without key

Motor capacity	Gear Ratio	Model (Straight shaft)
400 W	1/5	R88G-HPG32A052K0B
	1/11	R88G-HPG32A112K0B
	1/21	R88G-HPG32A211K5B
	1/33	R88G-HPG32A33600SB
	1/45	R88G-HPG32A45400SB
600 W	1/5	R88G-HPG32A052K0B
	1/11	R88G-HPG32A112K0B
	1/21	R88G-HPG32A211K5B
	1/33	R88G-HPG32A33600SB
	1/45	R88G-HPG50A451K5B
1 kW	1/5	R88G-HPG32A053K0B
	1/11	R88G-HPG32A112K0SB
	1/21	R88G-HPG32A211K0SB
	1/33	R88G-HPG50A332K0SB
	1/45	R88G-HPG50A451K0SB
1.5 kW	1/5	R88G-HPG32A053K0B
	1/11	R88G-HPG32A112K0SB
	1/21	R88G-HPG50A213K0B
	1/33	R88G-HPG50A332K0SB
2 kW	1/5	R88G-HPG32A053K0B
	1/11	R88G-HPG32A112K0SB
	1/21	R88G-HPG50A213K0B
	1/33	R88G-HPG50A332K0SB
3 kW	1/5	R88G-HPG32A054K0B
	1/11	R88G-HPG50A115K0B
	1/21	R88G-HPG50A213K0SB
	1/25	R88G-HPG65A253K0SB
4 kW	1/5	R88G-HPG50A055K0SB
	1/11	R88G-HPG50A115K0SB
	1/20	R88G-HPG65A205K0SB
	1/25	R88G-HPG65A255K0SB
5 kW	1/5	R88G-HPG50A055K0SB
	1/11	R88G-HPG50A115K0SB
	1/20	R88G-HPG65A205K0SB
	1/25	R88G-HPG65A255K0SB

Note: 1. The standard models have a straight shaft.
2. To order a Servomotor with a straight shaft with key, add "J" to the end of the model number, in the place indicated by the box.

● 1,000-r/min servomotors

Straight shaft without key

Motor capacity	Gear Ratio	Model (Straight shaft)
900 W	1/5	R88G-HPG32A053K0B
	1/11	R88G-HPG32A112K0SB
	1/21	R88G-HPG50A213K0B
	1/33	R88G-HPG50A332K0SB
2 kW	1/5	R88G-HPG32A052K0TB
	1/11	R88G-HPG50A112K0TB
	1/21	R88G-HPG50A212K0TB
	1/25	R88G-HPG65A255K0SB
3 kW	1/5	R88G-HPG50A055K0SB
	1/11	R88G-HPG50A115K0SB
	1/20	R88G-HPG65A205K0SB
	1/25	R88G-HPG65A255K0SB

Note: 1. The standard models have a straight shaft.
 2. To order a Servomotor with a straight shaft with key, add "J" to the end of the model number, in the place indicated by the box.

Backlash = 15' Max
<Cylinder Type>

● 3,000-r/min servomotors

Straight shaft with key

Motor capacity	Gear Ratio	Model (Straight shaft)
50 W	1/5	R88G-VRSF05B100CJ
	1/9	R88G-VRSF09B100CJ
	1/15	R88G-VRSF15B100CJ
	1/25	R88G-VRSF25B100CJ
100 W	1/5	R88G-VRSF05B100CJ
	1/9	R88G-VRSF09B100CJ
	1/15	R88G-VRSF15B100CJ
	1/25	R88G-VRSF25B100CJ
200 W	1/5	R88G-VRSF05B200CJ
	1/9	R88G-VRSF09C200CJ
	1/15	R88G-VRSF15C200CJ
	1/25	R88G-VRSF25C200CJ
400 W	1/5	R88G-VRSF05C400CJ
	1/9	R88G-VRSF09C400CJ
	1/15	R88G-VRSF15C400CJ
	1/25	R88G-VRSF25C400CJ
750 W	1/5	R88G-VRSF05C750CJ
	1/9	R88G-VRSF09D750CJ
	1/15	R88G-VRSF15D750CJ
	1/25	R88G-VRSF25D750CJ

Accessories and Cables

■ Connection Cables (Power Cables, Brake Cables, Encoder Cables)

<Standard Cables>

Power cable

Specifications		Without brake	With brake
		Model	Model
[100 V/200 V] 3,000-r/min Servomotors of 50 to 750 W	3 m	R88A-CAKA003S	
	5 m	R88A-CAKA005S	
	10 m	R88A-CAKA010S	
	15 m	R88A-CAKA015S	
	20 m	R88A-CAKA020S	
	30 m	R88A-CAKA030S	
	40 m	R88A-CAKA040S	
	50 m	R88A-CAKA050S	
[200 V] 3,000-r/min Servomotors of 1 to 2 kW 2,000-r/min Servomotors of 1 to 2 kW 1,000-r/min Servomotors of 900 W	3 m	R88A-CAGB003S	R88A-CAGB003B
	5 m	R88A-CAGB005S	R88A-CAGB005B
	10 m	R88A-CAGB010S	R88A-CAGB010B
	15 m	R88A-CAGB015S	R88A-CAGB015B
	20 m	R88A-CAGB020S	R88A-CAGB020B
	30 m	R88A-CAGB030S	R88A-CAGB030B
	40 m	R88A-CAGB040S	R88A-CAGB040B
	50 m	R88A-CAGB050S	R88A-CAGB050B
[400 V] 3,000-r/min Servomotors of 750 W to 2 kW 2,000-r/min Servomotors of 400 W to 2 kW 1,000-r/min Servomotors of 900 W	3 m	R88A-CAGB003S	R88A-CAKF003B
	5 m	R88A-CAGB005S	R88A-CAKF005B
	10 m	R88A-CAGB010S	R88A-CAKF010B
	15 m	R88A-CAGB015S	R88A-CAKF015B
	20 m	R88A-CAGB020S	R88A-CAKF020B
	30 m	R88A-CAGB030S	R88A-CAKF030B
	40 m	R88A-CAGB040S	R88A-CAKF040B
	50 m	R88A-CAGB050S	R88A-CAKF050B
[200 V] [400 V] 3,000-r/min Servomotors of 3 to 5 kW 2,000-r/min Servomotors of 3 to 5 kW 1,000-r/min Servomotors of 2 to 4.5 kW	3 m	R88A-CAGD003S	R88A-CAGD003B
	5 m	R88A-CAGD005S	R88A-CAGD005B
	10 m	R88A-CAGD010S	R88A-CAGD010B
	15 m	R88A-CAGD015S	R88A-CAGD015B
	20 m	R88A-CAGD020S	R88A-CAGD020B
	30 m	R88A-CAGD030S	R88A-CAGD030B
	40 m	R88A-CAGD040S	R88A-CAGD040B
	50 m	R88A-CAGD050S	R88A-CAGD050B
[200 V] [400 V] 2,000-r/min Servomotors of 7.5 kW 1,000-r/min Servomotors of 6 kW	3 m	R88A-CAGE003S	
	5 m	R88A-CAGE005S	
	10 m	R88A-CAGE010S	
	15 m	R88A-CAGE015S	
	20 m	R88A-CAGE020S	
	30 m	R88A-CAGE030S	
	40 m	R88A-CAGE040S	
	50 m	R88A-CAGE050S	

Note: 1. Different connectors are used for the motor power and the brake on 100-V and 200-V, 3,000-r/min Servomotors of 50 to 750 W and Servomotors of 6 to 15 kW. When using a Servomotor with a brake, two cables are required: a Power Cable without Brake and a Brake Cable.

2. For non-flexible power cables for Servomotors of 11 or 15 kW, refer to the relevant manuals of G5-Series and make your own cable.

Brake Cable

Specifications		Standard Cables
		Model
[100 V][200 V] 3,000-r/min Servomotors of 50 to 750 W	3 m	R88A-CAKA003B
	5 m	R88A-CAKA005B
	10 m	R88A-CAKA010B
	15 m	R88A-CAKA015B
	20 m	R88A-CAKA020B
	30 m	R88A-CAKA030B
	40 m	R88A-CAKA040B
	50 m	R88A-CAKA050B
[200 V][400 V] 1,500-r/min Servomotors of 7.5 to 15 kW 1,000-r/min Servomotors of 6 kW	3 m	R88A-CAGE003B
	5 m	R88A-CAGE005B
	10 m	R88A-CAGE010B
	15 m	R88A-CAGE015B
	20 m	R88A-CAGE020B
	30 m	R88A-CAGE030B
	40 m	R88A-CAGE040B
	50 m	R88A-CAGE050B

Encoder Cable

Specifications		Standard Cables
		Model
[100 V/200 V] 3,000-r/min Servomotors of 50 to 750 W	3 m	R88A-CRKA003C
	5 m	R88A-CRKA005C
	10 m	R88A-CRKA010C
	15 m	R88A-CRKA015C
	20 m	R88A-CRKA020C
	30 m	R88A-CRKA030C
	40 m	R88A-CRKA040C
	50 m	R88A-CRKA050C
[100 V and 200 V] 3,000-r/min Servomotors of 1.0 kW or more 2,000-r/min Servomotors 1,500-r/min Servomotors 1,000-r/min Servomotors [400 V] 3,000-r/min Servomotors 2,000-r/min Servomotors 1,500-r/min Servomotors 1,000-r/min Servomotors	3 m	R88A-CRKC003N
	5 m	R88A-CRKC005N
	10 m	R88A-CRKC010N
	15 m	R88A-CRKC015N
	20 m	R88A-CRKC020N
	30 m	R88A-CRKC030N
	40 m	R88A-CRKC040N
	50 m	R88A-CRKC050N

<Robot Cables>

Power cable

Specifications		Without brake	With brake
		Model	Model
[100 V/200 V] 3,000-r/min Servomotors of 50 to 750 W	3 m	R88A-CAKA003SR(-E)	Note: Separate connectors for power and brakes for 3,000-r/min Servomotors of 50 to 750W. When a Servomotor with a brake is used, it is necessary to use both a PowerCable for Servomotors without brakes and Power cable.
	5 m	R88A-CAKA005SR(-E)	
	10 m	R88A-CAKA010SR(-E)	
	15 m	R88A-CAKA015SR(-E)	
	20 m	R88A-CAKA020SR(-E)	
	30 m	R88A-CAKA030SR	
	40 m	R88A-CAKA040SR	
	50 m	R88A-CAKA050SR	
[200 V] 3,000-r/min Servomotors of 1 to 2 kW 2,000-r/min Servomotors of 1 to 2 kW 1,000-r/min Servomotors of 900 W	3 m	R88A-CAGB003SR(-E)	R88A-CAGB003BR(-E)
	5 m	R88A-CAGB005SR(-E)	R88A-CAGB005BR(-E)
	10 m	R88A-CAGB010SR(-E)	R88A-CAGB010BR(-E)
	15 m	R88A-CAGB015SR(-E)	R88A-CAGB015BR(-E)
	20 m	R88A-CAGB020SR(-E)	R88A-CAGB020BR(-E)
	30 m	R88A-CAGB030SR	R88A-CAGB030BR
	40 m	R88A-CAGB040SR	R88A-CAGB040BR
	50 m	R88A-CAGB050SR	R88A-CAGB050BR
[400 V] 3,000-r/min Servomotors of 750 W to 2 kW 2,000-r/min Servomotors of 400 W to 2 kW 1,000-r/min Servomotors of 900 W	3 m	R88A-CAGB003SR(-E)	R88A-CAKF003BR(-E)
	5 m	R88A-CAGB005SR(-E)	R88A-CAKF005BR(-E)
	10 m	R88A-CAGB010SR(-E)	R88A-CAKF010BR(-E)
	15 m	R88A-CAGB015SR(-E)	R88A-CAKF015BR(-E)
	20 m	R88A-CAGB020SR(-E)	R88A-CAKF020BR(-E)
	30 m	R88A-CAGB030SR	R88A-CAKF030BR
	40 m	R88A-CAGB040SR	R88A-CAKF040BR
	50 m	R88A-CAGB050SR	R88A-CAKF050BR
[200 V] [400 V] 3,000-r/min Servomotors of 3 to 5 kW 2,000-r/min Servomotors of 3 to 5 kW 1,000-r/min Servomotors of 2 to 4.5 kW	3 m	R88A-CAGD003SR(-E)	R88A-CAGD003BR(-E)
	5 m	R88A-CAGD005SR(-E)	R88A-CAGD005BR(-E)
	10 m	R88A-CAGD010SR(-E)	R88A-CAGD010BR(-E)
	15 m	R88A-CAGD015SR(-E)	R88A-CAGD015BR(-E)
	20 m	R88A-CAGD020SR(-E)	R88A-CAGD020BR(-E)
	30 m	R88A-CAGD030SR	R88A-CAGD030BR
	40 m	R88A-CAGD040SR	R88A-CAGD040BR
	50 m	R88A-CAGD050SR	R88A-CAGD050BR
[200 V and 400 V] 1,500-r/min Servomotors of 7.5 kW 1,000-r/min Servomotors of 6 kW	3 m	R88A-CAGE003SR	Note: Separate connectors for power and brakes for 1,500-r/min Servomotors of 7.5 to 15.0kW and 1,000-r/min Servomotors of 6.0kW. When a Servomotor with a brake is used, it is necessary to use both a PowerCable for Servomotors without brakes and Power cable.
	5 m	R88A-CAGE005SR	
	10 m	R88A-CAGE010SR	
	15 m	R88A-CAGE015SR	
	20 m	R88A-CAGE020SR	
	30 m	R88A-CAGE030SR	
	40 m	R88A-CAGE040SR	
	50 m	R88A-CAGE050SR	

Note: 1. Different connectors are used for the motor power and the brake on 100-V and 200-V, 3,000-r/min Servomotors of 50 to 750 W and Servomotors of 6 to 15 kW. When using a Servomotor with a brake, two cables are required: a Power Cable without Brake and a Brake Cable.

Note: 2. For flexible power cables for Servomotors of 6 to 15 kW, refer to the relevant manuals of G5-Series and make your own cable.

AC Servomotor/Drive OMNUC G5-series

Brake Cable

Specifications		Robot Cables
		Model
[100 V/200 V] 3,000-r/min Servomotors of 50 to 750 W	3 m	R88A-CAKA003BR(-E)
	5 m	R88A-CAKA005BR(-E)
	10 m	R88A-CAKA010BR(-E)
	15 m	R88A-CAKA015BR(-E)
	20 m	R88A-CAKA020BR(-E)
	30 m	R88A-CAKA030BR
	40 m	R88A-CAKA040BR
	50 m	R88A-CAKA050BR

Note: For flexible brake cables for Servomotors of 6 to 15 kW, refer to the relevant manuals of G5-Series and make your own brake cable.

Encoder Cable

Specifications		Robot Cables
		Model
[100 V/200 V] 3,000-r/min Servomotors of 50 to 750 W	3 m	R88A-CRKA003CR(-E)
	5 m	R88A-CRKA005CR(-E)
	10 m	R88A-CRKA010CR(-E)
	15 m	R88A-CRKA015CR(-E)
	20 m	R88A-CRKA020CR(-E)
	30 m	R88A-CRKA030CR
	40 m	R88A-CRKA040CR
	50 m	R88A-CRKA050CR
[200 V] 3,000-r/ min Servomotors of 1 to 5 kW [400 V] 3,000-r/ min Servomotors of 750 W to 5 kW [200 V and 400 V] 2,000-r/min Servomotors 1,500-r/min Servomotors 1,000-r/min Servomotors	3 m	R88A-CRKC003NR(-E)
	5 m	R88A-CRKC005NR(-E)
	10 m	R88A-CRKC010NR(-E)
	15 m	R88A-CRKC015NR(-E)
	20 m	R88A-CRKC020NR(-E)
	30 m	R88A-CRKC030NR
	40 m	R88A-CRKC040NR
	50 m	R88A-CRKC050NR

■ Cable/Connector

Absolute Encoder Backup Battery & Absolute Encoder Battery Cable

Description		Length	model
Absolute Encoder Battery Cable	Without Backup Battery	0.3 m	R88A-CRGD0R3C
	With Backup Battery	0.3 m	R88A-CRGD0R3C-BS
Absolute Encoder Backup Battery (2,000 mA ·3.6 V)		-	R88A-BAT01G

Cables

Description		Length	model
Analog Monitor Cables		1 m	R88A-CMK001S
General Purpose Control I/O Cables (CN1)	Analog/Pulse Train Input Servodrive (R88D-KT□)	1 m	R88A-CPG001S
		2 m	R88A-CPG002S
	Network Communications Servodrive (R88D-KN□)	1 m	R88A-CPKB001S-AP
		2 m	R88A-CPKB002S-AP
External encoder cable (CN4)		5 m	R88A-CRKM005SR-E
		10 m	R88A-CRKM010SR-E
		20 m	R88A-CRKM020SR-E
Safety Connecting Cable (CN8)		3 m	R88A-CSK003S-E

Servo Drive Connectors

Description		Connects to	Model
Control I/O Connector	Analog/Pulse Train Input Servodrive (R88D-KT□)	CN1	R88A-CNU11C
	Network Communications Servodrive (R88D-KN□)	CN1	R88A-CNW01C
Main Circuit Power Supply Connector	[100VAC] 50W-400W	CNA	R88A-CNA02G-AP
	[200VAC] 100W-1.5kW		R88A-CNA01K-AP
	[400VAC] 600W-1.5kW		R88A-CNA02K-AP
	[200VAC] 2.0kW		R88A-CNA03K-AP
	[400VAC] 2.0kW		R88A-CNA03K-AP
Servomotor Power Connector	[100VAC] 50W-400W	CNB	R88A-CNB01G-AP
	[200VAC] 100W-1.5kW		R88A-CNB01K-AP
	[400VAC] 600W-1.5kW	CNB	R88A-CNB02K-AP
	[200VAC] 2.0kW		R88A-CNB02K-AP
24Vdc Control Circuit Connector	[400VAC] 600W-2.0kW	CNC	R88A-CNC01K-AP
	[400VAC] 600W-1.5kW	CND	R88A-CND01K-AP
Regenerative Resistor Connector	[200VAC] 2.0kW	CND	R88A-CND02K-AP
	[400VAC] 2.0kW		R88A-CND02K-AP
Servomotor Encoder Connector		CN2	R88A-CNW01R
External Encoder Connector		CN4	R88A-CNK41L
Safety I/O Signal Connector		CN8	R88A-CNK81S

Servomotor Connectors

Description	Applicable Servomotor Capacity	Model
Servomotor Encoder Connector	[100 V/200 V] 3,000 r/min (50 to 750 W)	R88A-CNK02R
	[100 V/200 V] 3,000 r/min (1 to 5 kW), 2,000 r/min, 1,000 r/min	R88A-CNK04R
	[400 V] 3,000 r/min, 2,000 r/min, 1,000 r/min	
Power Cable Connector	[100 V/200 V] 3,000 r/min (50 to 750 W)	R88A-CNK11A
	[200 V] [400V] 1,000 r/min (6 kW), 1,500 r/min (7.5 to 15kW)	R88A-CNK21A-AP
Brake Cable Connector	[100 V/200 V] 3,000 r/min (50 to 750 W)	R88A-CNK11B
	[200 V] [400V] 1,000 r/min (6 kW), 1,500 r/min (7.5 to 15kW)	R88A-CNK21B-AP

■ Control Cables

Control Cables (for Connector Terminal Block/CN1)

Name	Specifications			Model
Connector Terminal Block Cables	General-purpose Input		Length 1.0 m	XW2Z-100J-B24
			Length 2.0 m	XW2Z-200J-B24
	MECHATROLINK-II Communications EtherCAT Communications		Length 1.0 m	XW2Z-100J-B34
			Length 2.0 m	XW2Z-200J-B34
Connector Terminal Block Conversion Unit	General-purpose Input	Conversion Unit for General-purpose Controllers (M3 screws)	Through type	XW2B-50G4
		Conversion Unit for General-purpose Controllers (M3.5 screws)	Through type	XW2B-50G5
		Conversion Unit for General-purpose Controllers (M3 screws)	Slim type	XW2D-50G6
	MECHATROLINK-II Communications EtherCAT Communications	Conversion Unit for General-purpose Controllers (M3 screws)	Through type	XW2B-20G4
		Conversion Unit for General-purpose Controllers (M3.5 screws)	Through type	XW2B-20G5
		Conversion Unit for General-purpose Controllers (M3 screws)	Slim type	XW2D-20G6

● General-purpose Inputs (Analog input/Pulse train input type)

Connection Cables (for CN1)

Specifications		The number of axes	Length	Model
Name	Unit			
Position Control Unit (High-speed type) for Line-driver output	CJ1W-NC234/434	for 1 axis	1 m	XW2Z-100J-G9
			5 m	XW2Z-500J-G9
			10 m	XW2Z-10MJ-G9
		for 2 axis	1 m	XW2Z-100J-G1
			5 m	XW2Z-500J-G1
			10 m	XW2Z-10MJ-G1
Position Control Unit (High-speed type) for Open collector output	CJ1W-NC214/NC414	for 1 axis	1 m	XW2Z-100J-G13
			3 m	XW2Z-300J-G13
			1 m	XW2Z-100J-G5
		for 2 axis	3 m	XW2Z-300J-G5
			1 m	R88A-CPG001M1
			2 m	R88A-CPG002M1
Control Cables for Motion Control Unit	CS1W-MC221 (-V1) CS1W-MC421 (-V1)	for 1 axis	3 m	R88A-CPG003M1
			5 m	R88A-CPG005M1
			1 m	R88A-CPG001M2
			2 m	R88A-CPG002M2
		for 2 axis	3 m	R88A-CPG003M2
			5 m	R88A-CPG005M2
			1 m	R88A-CPG001S
			2 m	R88A-CPG002S
General-purpose Control Cables with Connector on One End	Cables for General-purpose Controllers	—	1 m	R88A-CPG001S
			2 m	R88A-CPG002S

Device for External Signal Connection / Connecting Cables (for CJ1W-NC□□4)

Name		Specifications		Model
Connector Terminal Block Cables	Connection Cables	Normal wiring	Length 0.5 m	XW2Z-C50X
			Length 1.0 m	XW2Z-100X
			Length 2.0 m	XW2Z-200X
			Length 3.0 m	XW2Z-300X
			Length 5.0 m	XW2Z-500X
			Length 10.0 m	XW2Z-010X
	Connector Terminal Block Conversion Unit	20 pin M2.4 screw Terminal Block type	Through type	XW2B-20G4
		20 pin M3.5 screw Terminal Block type	Through type	XW2B-20G5
		20 pin M3 screw Terminal Block type	Slim type	XW2D-20G6

Servo Relay Units (for CN1)

Specifications	The number of axes	Model
Position Control Unit: For CJ1W-NC113/NC133 For CS1W-NC113/NC133 For C200HW-NC113	for 1 axis	XW2B-20J6-1B
Position Control Unit: For CJ1W-NC213/NC233/NC413/NC433 For CS1W-NC213/NC233/NC413/NC433 For C200HW-NC213/NC413	for 2 axis	XW2B-40J6-2B
For CJ1M-CPU21/CPU22/CPU23	for 1 axis	XW2B-20J6-8A
	for 2 axis	XW2B-40J6-9A
For FQM1-MMA22 (Analog output) For FQM1-MMP22 (Pulse train output)	for 2 axis	XW2B-80J7-12A
For CQM1H-PLB21	for 1 axis	XW2B-20J6-3B

Servo Relay Unit cable (for Servo Drive/CN1)

Specifications	Length	Model
Position Control Unit: For CJ1W-NC□□3□ For CS1W/C200HW-NC□□□□ (XW2B-20J6-1B, XW2B-40J6-2B) For CQM1H-PLB21 (XW2B-20J6-3B)	1 m	XW2Z-100J-B25
	2 m	XW2Z-200J-B25
For CJ1M-CPU21/CPU22/CPU23 (XW2B-20J6-8A, XW2B-40J6-9A)	1 m	XW2Z-100J-B31
	2 m	XW2Z-200J-B31
For FQM1-MMA22 (Analog output) (XW2B-80J7-12A)	1 m	XW2Z-100J-B27
	2 m	XW2Z-200J-B27
For FQM1-MMP22 (Pulse train output) (XW2B-80J7-12A)	1 m	XW2Z-100J-B26
	2 m	XW2Z-200J-B26

Servo Relay Unit cable (Position Control Unit)

Specifications		The number of axes	Length	Model
CJ1W line-driver output type For CJ1W-NC133 (XW2B-20J6-1B)		for 1 axis	0.5 m	XW2Z-050J-A18
			1 m	XW2Z-100J-A18
CJ1W line-driver output type For CJ1W-NC233/NC433 (XW2B-40J6-2B)		for 2 axis	0.5 m	XW2Z-050J-A19
			1 m	XW2Z-100J-A19
CS1W line-driver output type For CS1W-NC133 (XW2B-20J6-1B)		for 1 axis	0.5 m	XW2Z-050J-A10
			1 m	XW2Z-100J-A10
CS1W line-driver output type For CS1W-NC233/NC433 (XW2B-40J6-2B)		for 2 axis	0.5 m	XW2Z-050J-A11
			1 m	XW2Z-100J-A11
CJ1W open collector output type For CJ1W-NC113 (XW2B-20J6-1B)		for 1 axis	0.5 m	XW2Z-050J-A14
			1 m	XW2Z-100J-A14
CJ1W open collector output type For CJ1W-NC213/NC413 (XW2B-40J6-2B)		for 2 axis	0.5 m	XW2Z-050J-A15
			1 m	XW2Z-100J-A15
CS1W/C200HW open collector output type For CS1W-NC113 For C200HW-NC113 (XW2B-20J6-1B)		for 1 axis	0.5 m	XW2Z-050J-A6
			1 m	XW2Z-100J-A6
CS1W/C200HW open collector output type For CS1W-NC213/NC413 For C200HW-NC213/NC413 (XW2B-40J6-2B)		for 2 axis	0.5 m	XW2Z-050J-A7
			1 m	XW2Z-100J-A7
CJ1M open collector output type For CJ1M-CPU21/CPU22/CPU23 (XW2B-20J6-8A, XW2B-40J6-9A)		for 1 axis	0.5 m	XW2Z-050J-A33
			1 m	XW2Z-100J-A33
For FQM1-MMA22 (Analog output) (XW2B-80J7-12A)	General-purpose I/O (26 pin)	for 2 axis	0.5 m	XW2Z-050J-A28
			1 m	XW2Z-100J-A28
			2 m	XW2Z-200J-A28
	Special I/O (40 pin)	for 2 axis	0.5 m	XW2Z-050J-A31
			1 m	XW2Z-100J-A31
			2 m	XW2Z-200J-A31
For FQM1-MMP22 (Pulse train output) (XW2B-80J7-12A)	General-purpose I/O (26 pin)	for 2 axis	0.5 m	XW2Z-050J-A28
			1 m	XW2Z-100J-A28
			2 m	XW2Z-200J-A28
	Special I/O (40 pin)	for 2 axis	0.5 m	XW2Z-050J-A30
			1 m	XW2Z-100J-A30
			2 m	XW2Z-200J-A30
For CQM1H-PLB21 (XW2B-20J6-3B)		for 1 axis	0.5 m	XW2Z-050J-A3
			1 m	XW2Z-100J-A3

● MECHATROLINK-II Communications

MECHATROLINK-related Devices and Cables (Manufactured by Yaskawa Corporation)

Name	Length	Model (OMRON model number)	Yaskawa model number
MECHATROLINK-II Cables (without ring core and USB connector on both ends) * Can be connected to R88D-GN and R88D-KN only.	0.5 m	FNY-W6002-A5	JEPMC-W6002-A5-E
	1.0 m	FNY-W6002-01	JEPMC-W6002-01-E
	3.0 m	FNY-W6002-03	JEPMC-W6002-03-E
	5.0 m	FNY-W6002-05	JEPMC-W6002-05-E
MECHATROLINK-II Cables (with ring core and USB connector on both ends)	0.5 m	FNY-W6003-A5	JEPMC-W6003-A5
	1.0 m	FNY-W6003-01	JEPMC-W6003-01
	3.0 m	FNY-W6003-03	JEPMC-W6003-03
	5.0 m	FNY-W6003-05	JEPMC-W6003-05
	10.0 m	FNY-W6003-10	JEPMC-W6003-10
	20.0 m	FNY-W6003-20	JEPMC-W6003-20
	30.0 m	FNY-W6003-30	JEPMC-W6003-30
MECHATROLINK-II Terminating Resistor	Terminating resistance	FNY-W6022	JEPMC-W6022
MECHATROLINK-II Repeater	Communications Repeater	FNY-REP2000	JEPMC-REP2000



- MECHATROLINK-related Devices and Cables are manufactured by Yaskawa Corporation, but they can be ordered directly from OMRON using the OMRON model numbers. (Yaskawa-brand products will be delivered even when they are ordered from OMRON.)

● Recommended EtherCAT Communications Cables

Category 5 or higher (100BASE-TX) straight cable with double shielding (aluminum tape and braided shielding) is recommended.

Cabel with Connectors

Wire Gauge and Number of Pairs: AWG22, 2-pair Cable

Item	Appearance	Recommended manufacturer	Cable length(m)	Model	
Cable with Connectors on Both Ends (RJ45/RJ45)		OMRON	0.3	XS5W-T421-AMD-K	
			0.5	XS5W-T421-BMD-K	
			1	XS5W-T421-CMD-K	
Cable with Connectors on Both Ends (M12/RJ45)			2	XS5W-T421-DMC-K	
			5	XS5W-T421-GMC-K	
			10	XS5W-T421-JMC-K	


Note: The cable length 0.3, 0.5, 1, 2, 3, 5, 10 and 15m are available. For details, refer to Cat.No.G019.

Cables / Connectors

Wire Gauge and Number of Pairs: AWG24, 4-pair Cable

Item	Appearance	Recommended manufacturer	Model
Cables	—	Tonichi Kyosan Cable, Ltd.	NETSTAR-C5E SAB 0.5 x 4P
	—	Kuramo Electric Co.	KETH-SB
	—	SWCC Showa Cable Systems Co.	FAE-5004
RJ45 Connectors	—	Panduit Corporation	MPS588

Wire Gauge and Number of Pairs: AWG22, 2-pair Cable

Item	Appearance	Recommended manufacturer	Model
Cables	—	Kuramo Electric Co.	KETH-PSB-OMR *
RJ45 Assembly Connector		OMRON	XS6G-T421-1 *

* We recommend you to use above cable and connector together.

■ Peripheral Devices (External Regeneration Resistors, Reactors, Mounting Brackets)

External Regeneration Resistors

Specifications	Model
80 W 50 Ω	R88A-RR08050S
80 W 100 Ω	R88A-RR080100S
220 W 47 Ω	R88A-RR22047S1
500 W 20 Ω	R88A-RR50020S

Reactors

Specifications			Model
General-purpose Inputs	MECHATROLINK-II Communications	EtherCAT Communications	
R88D-KTA5L/-KT01H (Single-phase)	R88D-KNA5L-ML2/-KN01H-ML2 (Single-phase)	R88D-KNA5L-ECT/-KN01H-ECT (Single-phase)	3G3AX-DL2002
R88D-KT01L/-KT02H (Single-phase)	R88D-KN01L-ML2/-KN02H-ML2 (Single-phase)	R88D-KN01L-ECT/-KN02H-ECT (Single-phase)	3G3AX-DL2004
R88D-KT02L/-KT04H (Single-phase)	R88D-KN02L-ML2/-KN04H-ML2 (Single-phase)	R88D-KN02L-ECT/-KN04H-ECT (Single-phase)	3G3AX-DL2007
R88D-KT04L/-KT08H/-KT10H (Single-phase)	R88D-KN04L-ML2/-KN08H-ML2/-KN10H-ML2 (Single-phase)	R88D-KN04L-ECT/-KN08H-ECT/-KN10H-ECT (Single-phase)	3G3AX-DL2015
R88D-KT15H (Single-phase)	R88D-KN15H-ML2 (Single-phase)	R88D-KN15H-ECT (Single-phase)	3G3AX-DL2022
R88D-KT01H/-KT02H/-KT04H/-KT08H/-KT10H/-KT15H (Three-phase)	R88D-KN01H-ML2/-KN02H-ML2/-KN04H-ML2/-KN08H-ML2/-KN10H-ML2/-KN15H-ML2 (Three-phase)	R88D-KN01H-ECT/-KN02H-ECT/-KN04H-ECT/-KN08H-ECT/-KN10H-ECT/-KN15H-ECT (Three-phase)	3G3AX-AL2025
R88D-KT20H/-KT30H	R88D-KN20H-ML2/-KN30H-ML2	R88D-KN20H-ECT/-KN30H-ECT	3G3AX-AL2055
R88D-KT50H	R88D-KN50H-ML2	R88D-KN50H-ECT	3G3AX-AL2110
R88D-KT06F/-KT10F/-KT15F	R88D-KN06F-ML2/-KN10F-ML2/-KN15F-ML2	R88D-KN06F-ECT/-KN10F-ECT/-KN15F-ECT	3G3AX-AL4025
R88D-KT20F/-KT30F	R88D-KN20F-ML2/-KN30F-ML2	R88D-KN20F-ECT/-KN30F-ECT	3G3AX-AL4055
R88D-KT50F	R88D-KN50F-ML2	R88D-KN50F-ECT	3G3AX-AL4110
R88D-KT75H/-KT150F	—	R88D-KT75H-ECT/-KT150F-ECT	3G3AX-AL4220

Mounting Brackets (L Brackets for Rack Mounting)

Specifications			Model
General-purpose Inputs	MECHATROLINK-II Communications	EtherCAT Communications	
R88D-KTA5L/-KT01L/-KT01H/-KT02H	R88D-KNA5L-ML2/-KN01L-ML2/-KN01H-ML2/-KN02H-ML2	R88D-KNA5L-ECT/-KN01L-ECT/-KN01H-ECT/-KN02H-ECT	R88A-TK01K
R88D-KT02L/-KT04H	R88D-KN02L-ML2/-KN04H-ML2	R88D-KN02L-ECT/-KN04H-ECT	R88A-TK02K
R88D-KT04L/-KT08H	R88D-KN04L-ML2/-KN08H-ML2	R88D-KN04L-ECT/-KN08H-ECT	R88A-TK03K
R88D-KT10H/-KT15H/-KT06F/-KT10F/-KT15F	R88D-KN10H-ML2/-KN15H-ML2/-KN06F-ML2/-KN10F-ML2/-KN15F-ML2	R88D-KN10H-ECT/-KN15H-ECT/-KN06F-ECT/-KN10F-ECT/-KN15F-ECT	R88A-TK04K

■ Support Software (CX-One/CX-Drive)

Product name	Specifications	Media		Model
		Number of licenses		
FA Integrated Tool Package CX-One Ver. 4.□	The CX-One is a comprehensive software package that integrates Support Software for OMRON PLCs and components. CX-One runs on following OS. OS: Windows XP (Service Pack 3 or higher), Vista or 7 Note: Except for Windows XP 64-bit version. CX-One Version 4.□ includes CX-Drive Ver.2.□. For details, refer to the CX-One catalog (Cat. No. R134). CX-Drive can still be ordered individually in the following model numbers.	1 license *1	DVD *2	CXONE-AL01D-V4
	Application software to set and control data for Inverters and Servos. OS: Windows 2000 (Service Pack 3 or higher), XP, or Vista Note: Except for 64-bit version.	1 license	CD	WS02-DRVC1

*1. Multi licenses are available for the CX-One (3, 10, 30, or 50 licenses).

*2. The CX-One is also available on CD (CXONE-AL□□C-V4).

Combination table

Servo Drive and Servomotor Combinations (3,000 r/min, 2,000 r/min, 1,000 r/min)

<Cylinder Type>

● 3,000-r/min servomotors

Power Supply Voltage	Servo Drive Model Numbers			Servomotor Model Numbers		
	General-purpose Inputs	MECHATROLINK-II	EtherCAT	Output	With incremental encoder	With absolute encoder
Single-phase 100 to 115 VAC	R88D-KTA5L	R88D-KNA5L-ML2	R88D-KNA5L-ECT	50 W	R88M-K05030H-□	R88M-K05030T-□
	R88D-KT01L	R88D-KN01L-ML2	R88D-KN01L-ECT	100 W	R88M-K10030L-□	R88M-K10030S-□
	R88D-KT02L	R88D-KN02L-ML2	R88D-KN02L-ECT	200 W	R88M-K20030L-□	R88M-K20030S-□
	R88D-KT04L	R88D-KN04L-ML2	R88D-KN04L-ECT	400 W	R88M-K40030L-□	R88M-K40030S-□
Single-phase/ three-phase 200 to 240 VAC	R88D-KT01H *	R88D-KN01H-ML2 *	R88D-KN01H-ECT *	50 W	R88M-K05030H-□ *	R88M-K05030T-□ *
	R88D-KT01H	R88D-KN01H-ML2	R88D-KN01H-ECT	100 W	R88M-K10030H-□	R88M-K10030T-□
	R88D-KT02H	R88D-KN02H-ML2	R88D-KN02H-ECT	200 W	R88M-K20030H-□	R88M-K20030T-□
	R88D-KT04H	R88D-KN04H-ML2	R88D-KN04H-ECT	400 W	R88M-K40030H-□	R88M-K40030T-□
	R88D-KT08H	R88D-KN08H-ML2	R88D-KN08H-ECT	750 W	R88M-K75030H-□	R88M-K75030T-□
	R88D-KT15H *	R88D-KN15H-ML2 *	R88D-KN15H-ECT *	1 kW	R88M-K1K030H-□ *	R88M-K1K030T-□ *
Three-phase 200 to 240 VAC	R88D-KT15H	R88D-KN15H-ML2	R88D-KN15H-ECT	1.5 kW	R88M-K1K530H-□	R88M-K1K530T-□
	R88D-KT20H	R88D-KN20H-ML2	R88D-KN20H-ECT	2 kW	R88M-K2K030H-□	R88M-K2K030T-□
	R88D-KT30H	R88D-KN30H-ML2	R88D-KN30H-ECT	3 kW	R88M-K3K030H-□	R88M-K3K030T-□
	R88D-KT50H	R88D-KN50H-ML2	R88D-KN50H-ECT *	4 kW	R88M-K4K030H-□	R88M-K4K030T-□
Three-phase 400 to 480 VAC	R88D-KT50H	R88D-KN50H-ML2	R88D-KN50H-ECT	5 kW	R88M-K5K030H-□	R88M-K5K030T-□
	R88D-KT10F	R88D-KN10F-ML2	R88D-KN10F-ECT *	750 W	R88M-K75030F-□	R88M-K75030C-□
	R88D-KT15F *	R88D-KN15F-ML2 *	R88D-KN15F-ECT *	1 kW	R88M-K1K030F-□ *	R88M-K1K030C-□ *
	R88D-KT15F	R88D-KN15F-ML2	R88D-KN15F-ECT	1.5 kW	R88M-K1K530F-□	R88M-K1K530C-□
	R88D-KT20F	R88D-KN20F-ML2	R88D-KN20F-ECT	2 kW	R88M-K2K030F-□	R88M-K2K030C-□
	R88D-KT30F	R88D-KN30F-ML2	R88D-KN30F-ECT	3 kW	R88M-K3K030F-□	R88M-K3K030C-□
	R88D-KT50F	R88D-KN50F-ML2	R88D-KN50F-ECT *	4 kW	R88M-K4K030F-□	R88M-K4K030C-□
	R88D-KT50F	R88D-KN50F-ML2	R88D-KN50F-ECT	5 kW	R88M-K5K030F-□	R88M-K5K030C-□

● 2,000-r/min servomotors

Power Supply Voltage	Servo Drive Model Numbers			Servomotor Model Numbers		
	General-purpose Inputs	MECHATROLINK-II	EtherCAT	Output	With incremental encoder	With absolute encoder
Single-phase/ three-phase 200 to 240 VAC	R88D-KT10H	R88D-KN10H-ML2	R88D-KN10H-ECT	1 kW	R88M-K1K020H-□	R88M-K1K020T-□
	R88D-KT15H	R88D-KN15H-ML2	R88D-KN15H-ECT	1.5 kW	R88M-K1K520H-□	R88M-K1K520T-□
Three-phase 200 to 240 VAC	R88D-KT20H	R88D-KN20H-ML2	R88D-KN20H-ECT	2 kW	R88M-K2K020H-□	R88M-K2K020T-□
	R88D-KT30H	R88D-KN30H-ML2	R88D-KN30H-ECT	3 kW	R88M-K3K020H-□	R88M-K3K020T-□
	R88D-KT50H *	R88D-KN50H-ML2 *	R88D-KN50H-ECT *	4 kW	R88M-K4K020H-□ *	R88M-K4K020T-□ *
	R88D-KT50H	R88D-KN50H-ML2	R88D-KN50H-ECT	5 kW	R88M-K5K020H-□	R88M-K5K020T-□
	R88D-KT75H	—	R88D-KN75H-ECT	7.5 kW	—	R88M-K7K515T-□
	R88D-KT150H *	—	R88D-KN150H-ECT *	11 kW	—	R88M-K11K015T-□ *
	R88D-KT150H	—	R88D-KN150H-ECT	15 kW	—	R88M-K15K015T-□
Three-phase 400 to 480 VAC	R88D-KT06F	R88D-KN06F-ML2	R88D-KN06F-ECT *	400 W	R88M-K40020F-□	R88M-K40020C-□
	R88D-KT06F	R88D-KN06F-ML2	R88D-KN06F-ECT	600 W	R88M-K60020F-□	R88M-K60020C-□
	R88D-KT10F	R88D-KN10F-ML2	R88D-KN10F-ECT	1 kW	R88M-K1K020F-□	R88M-K1K020C-□
	R88D-KT15F	R88D-KN15F-ML2	R88D-KN15F-ECT	1.5 kW	R88M-K1K520F-□	R88M-K1K520C-□
	R88D-KT20F	R88D-KN20F-ML2	R88D-KN20F-ECT	2 kW	R88M-K2K020F-□	R88M-K2K020C-□
	R88D-KT30F	R88D-KN30F-ML2	R88D-KN30F-ECT	3 kW	R88M-K3K020F-□	R88M-K3K020C-□
	R88D-KT50F *	R88D-KN50F-ML2 *	R88D-KN50F-ECT *	4 kW	R88M-K4K020F-□ *	R88M-K4K020C-□ *
	R88D-KT50F	R88D-KN50F-ML2	R88D-KN50F-ECT	5 kW	R88M-K5K020F-□	R88M-K5K020C-□
	R88D-KT75F	—	R88D-KN75F-ECT	7.5 kW	—	R88M-K7K515C-□
	R88D-KT150F *	—	R88D-KN150F-ECT *	11 kW	—	R88M-K11K015C-□ *
	R88D-KT150F	—	R88D-KN150F-ECT	15 kW	—	R88M-K15K015C-□

● 1,000-r/min servomotors

Power Supply Voltage	Servo Drive Model Numbers			Servomotor Model Numbers		
	General-purpose Inputs	MECHATROLINK-II	EtherCAT	Output	With incremental encoder	With absolute encoder
Single-phase/	R88D-KT15H *	R88D-KN15H-ML2 *	R88D-KN15H-ECT *	900 W	R88M-K90010H-□ *	R88M-K90010T-□ *
Three-phase 200 to 240 VAC	R88D-KT30H *	R88D-KN30H-ML2 *	R88D-KN30H-ECT *	2 kW	R88M-K2K010H-□ *	R88M-K2K010T-□ *
	R88D-KT50H *	R88D-KN50H-ML2 *	R88D-KN50H-ECT *	3 kW	R88M-K3K010H-□ *	R88M-K3K010T-□ *
	R88D-KT50H *	—	R88D-KN50H-ECT *	4.5 kW	—	R88M-K4K510T-□ *
	R88D-KT75H *	—	R88D-KN75H-ECT *	6 kW	—	R88M-K6K010T-□ *
Three-phase 400 to 480 VAC	R88D-KT15F *	R88D-KN15F-ML2 *	R88D-KN15F-ECT *	900 W	R88M-K90010F-□ *	R88M-K90010C-□ *
	R88D-KT30F *	R88D-KN30F-ML2 *	R88D-KN30F-ECT *	2 kW	R88M-K2K010F-□ *	R88M-K2K010C-□ *
	R88D-KT50F *	R88D-KN50F-ML2 *	R88D-KN50F-ECT *	3 kW	R88M-K3K010F-□ *	R88M-K3K010C-□ *
	R88D-KT50F *	—	R88D-KN50F-ECT *	4.5 kW	—	R88M-K4K510C-□ *
	R88D-KT75F *	—	R88D-KN75F-ECT *	6 kW	—	R88M-K6K010C-□ *

* Please note the capacity of Servo Drive and Servomotor are not same in this combination.

Servomotor and Decelerator Combinations (3,000 r/min, 2,000 r/min, 1,000 r/min)

<Cylinder Type>

● 3,000-r/min servomotors

Motor model	1/5	1/11 (1/9 for flange size No.11)	1/21	1/33	1/45
R88M-K05030□	R88G-HPG11B05100B□ (Also used with R88M-K10030□)	R88G-HPG11B09050B□ (Gear ratio 1/9)	R88G-HPG14A21100B□ (Also used with R88M-K10030□)	R88G-HPG14A33050B□	R88G-HPG14A45050B□
R88M-K10030□	R88G-HPG11B05100B□	R88G-HPG14A11100B□	R88G-HPG14A21100B□	R88G-HPG20A33100B□	R88G-HPG20A45100B□
R88M-K20030□	R88G-HPG14A05200B□	R88G-HPG14A11200B□	R88G-HPG20A21200B□	R88G-HPG20A33200B□	R88G-HPG20A45200B□
R88M-K40030□	R88G-HPG14A05400B□	R88G-HPG20A11400B□	R88G-HPG20A21400B□	R88G-HPG32A33400B□	R88G-HPG32A45400B□
R88M-K75030H/T (200 V)	R88G-HPG20A05750B□	R88G-HPG20A11750B□	R88G-HPG32A21750B□	R88G-HPG32A33750B□	R88G-HPG32A45750B□
R88M-K75030F/C (400 V)	R88G-HPG32A052K0B□ (Also used with R88M-K2K030□)	R88G-HPG32A112K0B□ (Also used with R88M-K2K030□)	R88G-HPG32A211K5B□ (Also used with R88M-K1K5030□)	R88G-HPG32A33600SB□ (Also used with R88M-K60020□)	R88G-HPG50A451K5B□ (Also used with R88M-K1K530□)
R88M-K1K030□	R88G-HPG32A052K0B□ (Also used with R88M-K2K030□)	R88G-HPG32A112K0B□ (Also used with R88M-K2K030□)	R88G-HPG32A211K5B□ (Also used with R88M-K1K5030□)	R88G-HPG50A332K0B□ (Also used with R88M-K2K030□)	R88G-HPG50A451K5B□ (Also used with R88M-K1K530□)
R88M-K1K530□	R88G-HPG32A052K0B□ (Also used with R88M-K2K030□)	R88G-HPG32A112K0B□ (Also used with R88M-K2K030□)	R88G-HPG32A211K5B□	R88G-HPG50A332K0B□ (Also used with R88M-K2K030□)	R88G-HPG50A451K5B□
R88M-K2K030□	R88G-HPG32A052K0B□	R88G-HPG32A112K0B□	R88G-HPG50A212K0B□	R88G-HPG50A332K0B□	—
R88M-K3K030□	R88G-HPG32A053K0B□	R88G-HPG50A113K0B□	R88G-HPG50A213K0B□	—	—
R88M-K4K030□	R88G-HPG32A054K0B□	R88G-HPG50A115K0B□ (Also used with R88M-K5K030□)	—	—	—
R88M-K5K030□	R88G-HPG50A055K0B□	R88G-HPG50A115K0B□	—	—	—

● 2,000-r/min servomotors

Motor model	1/5	1/11	1/21 (1/20 for flange size No.65)	1/33 (1/25 for flange size No.65)	1/45
R88M-K40020□ (Only 400 V)	R88G-HPG32A052K0B□ (Also used with R88M-K2K030□)	R88G-HPG32A112K0B□ (Also used with R88M-K2K030□)	R88G-HPG32A211K5B□ (Also used with R88M-K1K5030□)	R88G-HPG32A33600SB□ (Also used with R88M-K60020□)	R88G-HPG32A45400SB□
R88M-K60020□ (Only 400 V)	R88G-HPG32A052K0B□ (Also used with R88M-K2K030□)	R88G-HPG32A112K0B□ (Also used with R88M-K2K030□)	R88G-HPG32A211K5B□ (Also used with R88M-K1K5030□)	R88G-HPG32A33600SB□	R88G-HPG50A451K5B□ (R88M-K1K530□)
R88M-K1K020□	R88G-HPG32A053K0B□ (Also used with R88M-K3K030□)	R88G-HPG32A112K0SB□ (Also used with R88M-K2K020□)	R88G-HPG32A211K0SB□	R88G-HPG50A332K0SB□ (Also used with R88M-K2K020□)	R88G-HPG50A451K0SB□
R88M-K1K520□	R88G-HPG32A053K0B□ (Also used with R88M-K3K030□)	R88G-HPG32A112K0SB□ (Also used with R88M-K2K020□)	R88G-HPG50A213K0B□ (Also used with R88M-K3K030□)	R88G-HPG50A332K0SB□ (Also used with R88M-K2K020□)	—
R88M-K2K020□	R88G-HPG32A053K0B□ (Also used with R88M-K3K030□)	R88G-HPG32A112K0SB□	R88G-HPG50A213K0B□ (Also used with R88M-K3K030□)	R88G-HPG50A332K0SB□	—
R88M-K3K020□	R88G-HPG32A054K0B□ (Also used with R88M-K4K030□)	R88G-HPG50A115K0B□ (Also used with R88M-K5K030□)	R88G-HPG50A213K0SB□	R88G-HPG65A253K0SB□	—
R88M-K4K020□	R88G-HPG50A055K0SB□ (Also used with R88M-K5K020□)	R88G-HPG50A115K0SB□ (Also used with R88M-K3K030□)	R88G-HPG65A205K0SB□ (Also used with R88M-K3K030□)	R88G-HPG65A255K0SB□ (Also used with R88M-K5K020□)	—
R88M-K5K020□	R88G-HPG50A055K0SB□	R88G-HPG50A115K0SB□	R88G-HPG65A205K0SB□	R88G-HPG65A255K0SB□	—

● 1,000-r/min servomotors

Motor model	1/5	1/11	1/21 (1/20 for flange size No.65)	1/33 (1/25 for flange size No.65)
R88M-K90010□	R88G-HPG32A053K0B□ (Also used with R88M-K5K020□)	R88G-HPG32A112K0SB□ (Also used with R88M-K2K020□)	R88G-HPG50A213K0B□ (Also used with R88M-K3K030□)	R88G-HPG50A332K0SB□ (Also used with R88M-K2K020□)
R88M-K2K010□	R88G-HPG32A052K0TB□	R88G-HPG50A112K0TB□	R88G-HPG50A212K0TB□ (Also used with R88M-K5K020□)	R88G-HPG65A255K0SB□ (Also used with R88M-K5K020□)
R88M-K3K010□	R88G-HPG50A055K0SB□ (Also used with R88M-K5K020□)	R88G-HPG50A115K0SB□ (Also used with R88M-K5K020□)	R88G-HPG65A205K0SB□ (Also used with R88M-K5K020□)	R88G-HPG65A255K0SB□ (Also used with R88M-K5K020□)

Controller Combinations

● Servo Relay Units and Cables

Select the Servo Relay Unit and Cable according to the model number of the Position Control Unit being used.

Position Control Unit	Position Control Unit Cable		Servo Relay Unit		Servo Drive Cable
CQM1H-PLB21	XW2Z-□□□J-A3		XW2B-20J6-3B		XW2Z-□□□J-B25
CS1W-NC113	XW2Z-□□□J-A6		XW2B-20J6-1B		
C200HW-NC113					
CS1W-NC213	XW2Z-□□□J-A7		XW2B-40J6-2B		
CS1W-NC413					
C200HW-NC213					
C200HW-NC413					
CS1W-NC133	XW2Z-□□□J-A10		XW2B-20J6-1B		
CS1W-NC233	XW2Z-□□□J-A11		XW2B-40J6-2B		
CS1W-NC433					
CJ1W-NC113	XW2Z-□□□J-A14		XW2B-20J6-1B		
CJ1W-NC213	XW2Z-□□□J-A15		XW2B-40J6-2B		
CJ1W-NC413					
CJ1W-NC133	XW2Z-□□□J-A18		XW2B-20J6-1B		
CJ1W-NC233	XW2Z-□□□J-A19		XW2B-40J6-2B		
CJ1W-NC433					
CJ1M-CPU21	XW2Z-□□□J-A33		For 1 axis	XW2B-20J6-8A	XW2Z-□□□J-B31
CJ1M-CPU22			For 2 axis	XW2B-40J6-9A	
CJ1M-CPU23					
FQM1-MMP22	General-purpose I/O	XW2Z-□□□J-A28	XW2B-80J7-12A		XW2Z-□□□J-B26
	Special I/O	XW2Z-□□□J-A30			XW2Z-□□□J-B27
FQM1-MMA22	General-purpose I/O	XW2Z-□□□J-A28			
	Special I/O	XW2Z-□□□J-A31			

Note: 1. Insert the cable length into the boxes in the model number (□□□). Position Control Unit cables come in two lengths: 0.5 m and 1 m (some are also available in lengths of 2 m). Servo Driver Cables also come in two lengths: 1 m and 2 m.

2. Two Servo Driver Cables are required if 2-axis control is performed using one Position Control Unit.

3. Direct cable is available for CJ1W-NC□□4 Position Control Unit (High-Speed type).

Specifications	The number of axes	Model
For CJ1W-NC214/-NC414 (open collector output type)	1 axis	XW2Z-□□□J-G13
For CJ1W-NC214/-NC414 (open collector output type)	2 axis	XW2Z-□□□J-G5
For CJ1W-NC234/-NC434 (line-driver output type)	1 axis	XW2Z-□□□J-G9
For CJ1W-NC234/-NC434 (line-driver output type)	2 axis	XW2Z-□□□J-G1

● Motion Control Unit Cables

There are special cables for 1-axis and 2-axis Motion Control Unit operation. Select the appropriate cable for the number of axes to be connected.

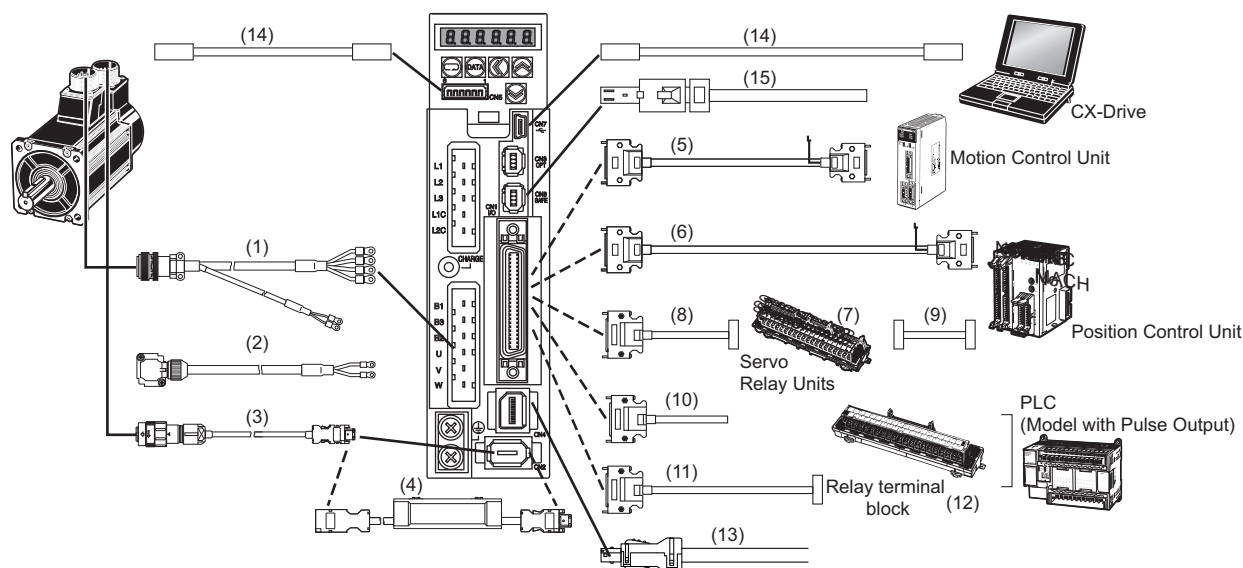
Motion Control Unit	Cable		Remarks
CS1W-MC221-V1	For 1 axis	R88A-CPG□□□M1	The □□□ digits in the model number indicate the cable length. Motion Control Unit Cables come in four lengths: 1 m, 2 m, 3 m, and 5 m. Example model number for 2-m 1-axis cable: R88A-CPG002M1
CS1W-MC421-V1	For 2 axis	R88A-CPG□□□M2	

MEMO

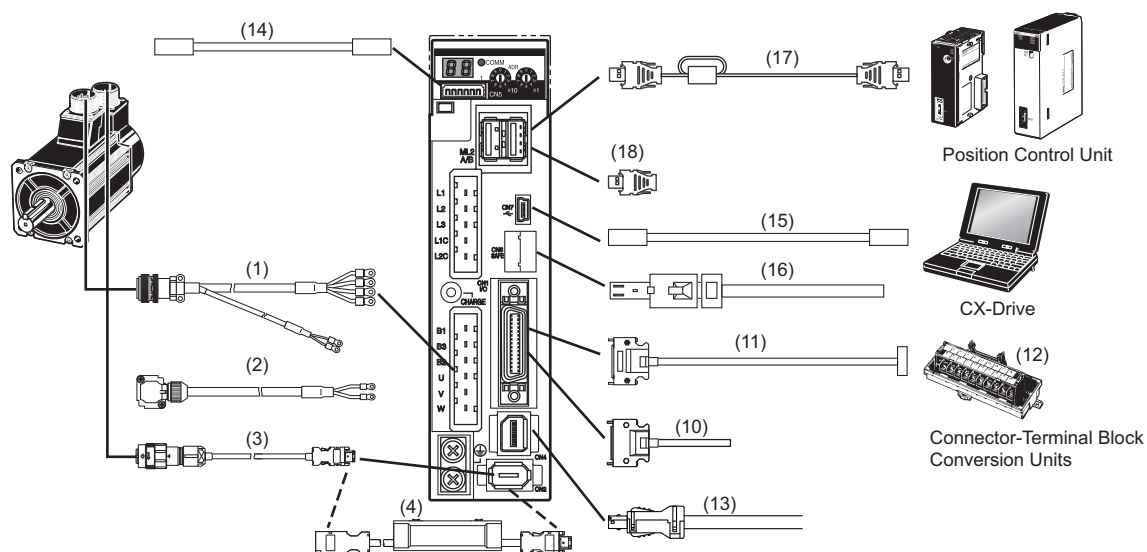
This image shows a full page of blank graph paper. The grid consists of small, evenly spaced squares formed by thin, light gray lines. There are no margins, text, or other markings on the page.

Cable Combinations

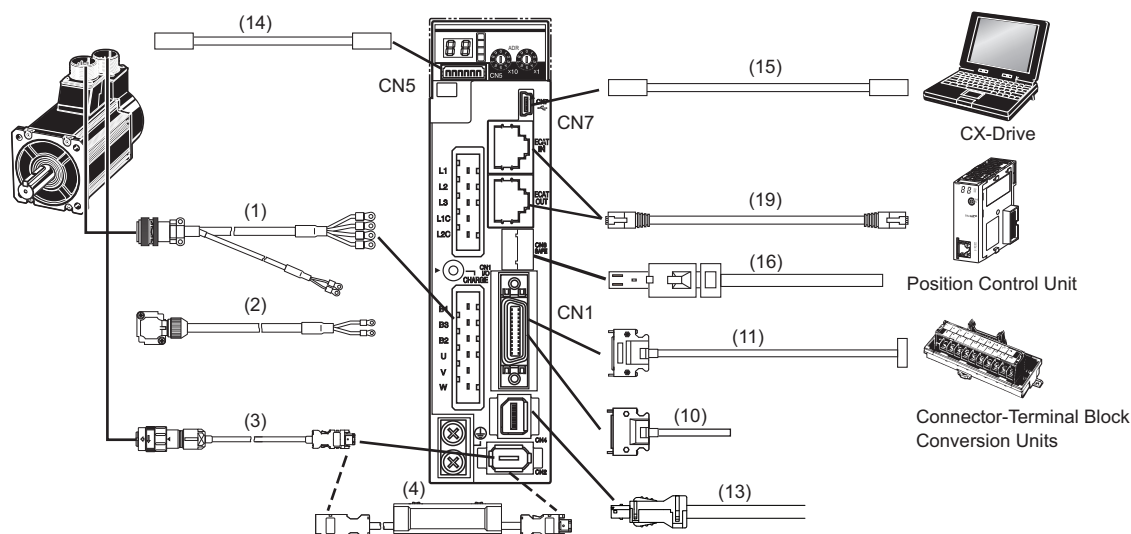
- **General-purpose Input**



- **MECHATROLINK-II Communications**

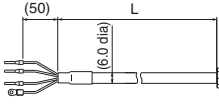
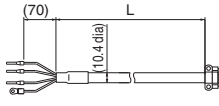
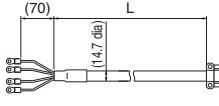
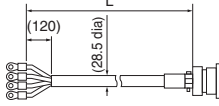
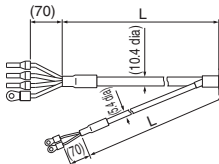
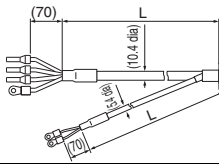
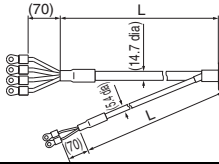


- **EtherCAT Communications**



AC Servomotor/Drive OMNUC G5-series

Servomotor Power Cables (For CNB)

Symbol		Name	Connected to	Model	Description
(1)	Standard Cables	Without Brakes	[100 V] [200 V] Cylindrical Servomotors, 3,000 r/min, 50 to 750 W	R88A-CAKA□□□S The empty boxes in the model number are for the cable length. The cable can be 3, 5, 10, 15, 20, 30, 40, or 50 m long.	 [Servomotor Connector] Angle plug: JN8FT04SJ1 (Japan Aviation Electronics Industry, Ltd.) Contact pins: ST-TMH-S-C1B-3500-A534G (Japan Aviation Electronics Industry, Ltd.)
			[200 V] Cylindrical Servomotors, 3,000 r/min, 1 to 2 kW Cylindrical Servomotors, 2,000 r/min, 1 to 2 kW Cylindrical Servomotors, 1,000 r/min, 900 W	R88A-CAGB□□□S The empty boxes in the model number are for the cable length. The cable can be 3, 5, 10, 15, 20, 30, 40, or 50 m long.	 [Servomotor Connector] Straight plug: N/MS3106B20-4S (Japan Aviation Electronics Industry, Ltd.) Cable clamp: N/MS3057-12A (Japan Aviation Electronics Industry, Ltd.)
			[400 V] Cylindrical Servomotors, 3,000 r/min, 750 W to 2 kW Cylindrical Servomotors, 2,000 r/min, 400 W to 2 kW Cylindrical Servomotors, 1,000 r/min, 900 W		
			[200 V] [400 V] Cylindrical Servomotors, 3,000 r/min, 3 to 5 kW Cylindrical Servomotors, 2,000 r/min, 3 to 5 kW Cylindrical Servomotors, 1,000 r/min, 2 to 4.5 kW	R88A-CAGD□□□S The empty boxes in the model number are for the cable length. The cable can be 3, 5, 10, 15, 20, 30, 40, or 50 m long.	 [Servomotor Connector] Straight plug: N/MS3106B22-22S (Japan Aviation Electronics Industry, Ltd.) Cable clamp: N/MS3057-12A (Japan Aviation Electronics Industry, Ltd.)
			[200 V] [400 V] Cylindrical Servomotors, 1,500 r/min, 7.5 kW Cylindrical Servomotors, 1,000 r/min, 6 kW	R88A-CAGE□□□S The empty boxes in the model number are for the cable length. The cable can be 3, 5, 10, 15, 20, 30, 40, or 50 m long.	 [Servomotor Connector] Straight plug: N/MS3106B32-17S (Japan Aviation Electronics Industry, Ltd.) Cable clamp: N/MS3057-20A (Japan Aviation Electronics Industry, Ltd.)
		With Brakes	Note: Different connectors are used for the motor power and the brake on 100-V and 200-V, 3,000-r/min Servomotors of 50 to 750 W and Servomotors of 6 to 15 kW. When using a Servomotor with a brake, two cables are required: a Power Cable without Brake and a Brake Cable.		
			[200 V] Cylindrical Servomotors, 3,000 r/min, 1 to 2 kW Cylindrical Servomotors, 2,000 r/min, 1 to 2 kW Cylindrical Servomotors, 1,000 r/min, 900 W	R88A-CAGB□□□B The empty boxes in the model number are for the cable length. The cable can be 3, 5, 10, 15, 20, 30, 40, or 50 m long.	 [Servomotor Connector] Straight plug: N/MS3106B20-18S (Japan Aviation Electronics Industry, Ltd.) Cable clamp: N/MS3057-12A (Japan Aviation Electronics Industry, Ltd.)
			[400 V] Cylindrical Servomotors, 3,000 r/min, 1 to 2 kW Cylindrical Servomotors, 2,000 r/min, 400 W to 2 kW Cylindrical Servomotors, 1,000 r/min, 900 W	R88A-CAKF□□□B The empty boxes in the model number are for the cable length. The cable can be 3, 5, 10, 15, 20, 30, 40, or 50 m long.	 [Servomotor Connector] Straight plug: N/MS3106B24-11S (Japan Aviation Electronics Industry, Ltd.) Cable clamp: N/MS3057-16A (Japan Aviation Electronics Industry, Ltd.)
			[200 V] [400 V] Cylindrical Servomotors, 3,000 r/min, 3 to 5 kW Cylindrical Servomotors, 2,000 r/min, 3 to 5 kW Cylindrical Servomotors, 1,000 r/min, 2 to 3 kW	R88A-CAGD□□□B The empty boxes in the model number are for the cable length. The cable can be 3, 5, 10, 15, 20, 30, 40, or 50 m long.	 [Servomotor Connector] Straight plug: N/MS3106B24-11S (Japan Aviation Electronics Industry, Ltd.) Cable clamp: N/MS3057-16A (Japan Aviation Electronics Industry, Ltd.)

Note: Insert the cable length into the boxes in the model number of cables. (3 m: 003, 5 m: 005, 10 m: 010)

Symbol		Name	Connected to	Model	Description
(1)	Robot Cables	Without Brakes	Robot Servomotor Power Cables for Servomotors without Brakes	[100 V] [200 V] Cylindrical Servomotors, 3,000 r/min, 50 to 750 W	R88A-CAKA□□□SR(-E) The empty boxes in the model number are for the cable length. The cable can be 3, 5, 10, 15, 20, 30, 40, or 50 m long.
				[200 V] Cylindrical Servomotors, 3,000 r/min, 1 to 2 kW Cylindrical Servomotors, 2,000 r/min, 1 to 2 kW Cylindrical Servomotors, 1,000 r/min, 900 W	R88A-CAGB□□□SR(-E) The empty boxes in the model number are for the cable length. The cable can be 3, 5, 10, 15, 20, 30, 40, or 50 m long.
				[400 V] Cylindrical Servomotors, 3,000 r/min, 750 W to 2 kW Cylindrical Servomotors, 2,000 r/min, 400 W to 2 kW Cylindrical Servomotors, 1,000 r/min, 900 W	R88A-CAGD□□□SR(-E) The empty boxes in the model number are for the cable length. The cable can be 3, 5, 10, 15, 20, 30, 40, or 50 m long.
				[200 V] [400 V] Cylindrical Servomotors, 1,000 r/min, 3 to 5 kW Cylindrical Servomotors, 2,000 r/min, 3 to 5 kW Cylindrical Servomotors, 1,000 r/min, 2 to 4.5 kW	R88A-CAGD□□□SR(-E) The empty boxes in the model number are for the cable length. The cable can be 3, 5, 10, 15, 20, 30, 40, or 50 m long.
	With Brakes	Robot Servomotor Power Cables for Servomotors with Brakes	Robot Servomotor Power Cables for Servomotors with Brakes	Note: Different connectors are used for the motor power and the brake on 100-V and 200-V, 3,000-r/min Servomotors of 50 to 750 W and Servomotors of 6 to 15 kW. When using a Servomotor with a brake, two cables are required: a Power Cable without Brake and a Brake Cable.	
				[200 V] Cylindrical Servomotors, 3,000 r/min, 1 to 2 kW Cylindrical Servomotors, 2,000 r/min, 1 to 2 kW Cylindrical Servomotors, 1,000 r/min, 900 W	R88A-CAGB□□□BR(-E) The empty boxes in the model number are for the cable length. The cable can be 3, 5, 10, 15, 20, 30, 40, or 50 m long.
				[400 V] Cylindrical Servomotors, 3,000 r/min, 1 to 2 kW Cylindrical Servomotors, 2,000 r/min, 400 W to 2 kW Cylindrical Servomotors, 1,000 r/min, 900 W	R88A-CAKF□□□BR(-E) The empty boxes in the model number are for the cable length. The cable can be 3, 5, 10, 15, 20, 30, 40, or 50 m long.
				[200 V] [400 V] Cylindrical Servomotors, 1,000 r/min, 3 to 5 kW Cylindrical Servomotors, 2,000 r/min, 3 to 5 kW Cylindrical Servomotors, 1,000 r/min, 2 to 3 kW	R88A-CAGD□□□BR The empty boxes in the model number are for the cable length. The cable can be 3, 5, 10, 15, 20, 30, 40, or 50 m long.

Note: Insert the cable length into the boxes in the model number of cables. (3 m: 003, 5 m: 005, 10 m: 010)

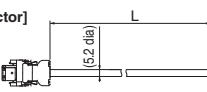
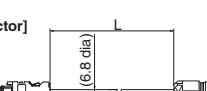


Brake Cables

Symbol		Name	Connected to	Model	Description
(2)	Standard Cables	Brake Cables (Standard Cables)	[100 V] [200 V] Cylindrical Servomotors, 3,000 r/min, 50 to 750 W	R88A-CAKA□□□B The empty boxes in the model number are for the cable length. The cable can be 3, 5, 10, 15, 20, 30, 40, or 50 m long. (3 to 20 m: 4.4 dia (3 to 50 m: 5.4 dia)	[Servomotor Connector] Angle plug: JN4FT02SJ1-R (Japan Aviation Electronics Industry, Ltd.) Connector pins: ST-TMH-S-C1B-3500-(A534G) (Japan Aviation Electronics Industry, Ltd.)
			[200 V] [400 V] Cylindrical Servomotors, 1,500 r/min, 7.5 to 15 kW 1,000 r/min, 6 kW	R88A-CAGE□□□B The empty boxes in the model number are for the cable length. The cable can be 3, 5, 10, 15, 20, 30, 40, or 50 m long. (5.4 dia)	[Servomotor Connector] Straight plug: N/MS3106B145-25 (Japan Aviation Electronics Industry, Ltd.) Connector pins: N/MS3057-6A (Japan Aviation Electronics Industry, Ltd.)
	Robot Cables	Brake Cables (Robot Cables)	[100 V] [200 V] Cylindrical Servomotors, 3,000 r/min, 50 to 750 W	R88A-CAKA□□□BR The empty boxes in the model number are for the cable length. The cable can be 3, 5, 10, 15, 20, 30, 40, or 50 m long. (3 to 20 m: 4.4 dia (3 to 50 m: 6.1 dia)	[Servomotor Connector] Angle plug: JN4FT02SJ1-R (Japan Aviation Electronics Industry, Ltd.) Connector pins: ST-TMH-S-C1B-3500-(A534G) (Japan Aviation Electronics Industry, Ltd.)

Note: Insert the cable length into the boxes in the model number of cables. (3 m: 003, 5 m: 005, 10 m: 010)

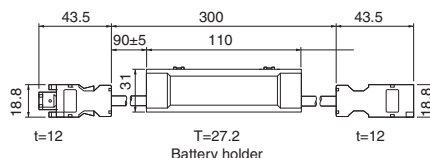
AC Servomotor/Drive OMNUC G5-series

Encoder Cables (for CN2)

Symbol	Name	Connected to	Model	Description
(3)	Standard Encoder Cables with Connectors	Cylindrical Servomotors, 3,000 r/min, 50 to 750 W (Absolute encoder/ Incremental encoder)	R88A-CRKA□□□C The empty boxes in the model number are for the cable length. The cable can be 3, 5, 10, 15, 20, 30, 40, or 50 m long. (3 to 20 m: 5.2 dia 30 to 50 m: 6.8 dia)	<div>[Servo Drive Connector] Connector: 55100-0670 (Molex Japan Co., Ltd.)</div>  <div>[Servomotor Connector] Angle clamp: JN6FR07SM1 (Japan Aviation Electronics Industry, Ltd.) Connector pins: LY10-C1-A1-10000 (Japan Aviation Electronics Industry, Ltd.)</div>
		Cylindrical Servomotors, 3,000 r/min, For 1 kW (200 V) For 750 W (400 V) Cylindrical Servomotors, 2,000 r/min, Cylindrical Servomotors, 1,000 r/min, (Absolute encoder/ Incremental encoder)	R88A-CRKC□□□N The empty boxes in the model number are for the cable length. The cable can be 3, 5, 10, 15, 20, 30, 40, or 50 m long.	<div>[Servo Drive Connector] Connector: 55100-0670 (Molex Japan Co., Ltd.)</div>  <div>[Servomotor Connector] Straight plug: JN2DS10SL2-R (Japan Aviation Electronics Industry, Ltd.) Contact: JN1-22-20S-10000 (Japan Aviation Electronics Industry, Ltd.)</div>
	Robot Encoder Cables with Connectors	Cylindrical Servomotors, 3,000 r/min, 50 to 750 W (Absolute encoder/ Incremental encoder)	R88A-CRKA□□□CR The empty boxes in the model number are for the cable length. The cable can be 3, 5, 10, 15, 20, 30, 40, or 50 m long. (3 to 20 m: 5.2 dia 30 to 50 m: 6.8 dia)	<div>[Servo Drive Connector] Connector: 55100-0670 (Molex Japan Co., Ltd.)</div>  <div>[Servomotor Connector] Angle clamp: JN6FR07SM1 (Japan Aviation Electronics Industry, Ltd.) Connector pins: LY10-C1-A1-10000 (Japan Aviation Electronics Industry, Ltd.)</div>
		Cylindrical Servomotors, 3,000 r/min, For 1 kW (200 V) For 750 W (400 V) Cylindrical Servomotors, 2,000 r/min, Cylindrical Servomotors, 1,000 r/min, (Absolute encoder/ Incremental encoder)	R88A-CRKC□□□NR The empty boxes in the model number are for the cable length. The cable can be 3, 5, 10, 15, 20, 30, 40, or 50 m long. (3 to 20 m: 6.8 dia 30 to 50 m: 7.7 dia)	<div>[Servo Drive Connector] Connector: 55100-0670 (Molex Japan Co., Ltd.)</div>  <div>[Servomotor Connector] Straight plug: JN2DS10SL2-R (Japan Aviation Electronics Industry, Ltd.) Cable clamp: JN1-22-22S-10000 (Japan Aviation Electronics Industry, Ltd.)</div>

Note: Insert the cable length into the boxes in the model number of cables. (3 m: 003, 5 m: 005, 10 m: 010)

Absolute Encoder Backup Battery and Absolute Encoder Battery Cable

Symbol	Name	Specifications	Model	Description
(4)	Absolute Encoder Battery Cable	Battery not included	0.3 m R88A-CRGD0R3C	
		One R88A-BAT01G Battery included.	0.3 m R88A-CRGD0R3C-BS	
	Absolute Encoder Backup Battery	—	R88A-BAT01G	—

Control Cables (for CN1)

Symbol	Name	Connected to	Model
(5)	Control Cables for Motion Control Units	Motion Control Units (for all SYSMAC CS1/C200H)	For 1 axis/ For 2 axis R88A-CPG□□□M◇ The empty boxes in the model number are for the cable length. The cable can be 1, 2, 3, or 5 m long. The empty diamond in the model number is for the number of axes. One axis: 1, Two axes: 2
(6)	Control Cables Direct connection cable for Position Control Unit (High-speed type)	Line-driver output type (High-speed type) for CJ1W-NC234/434	For 1 axis XW2Z-□□□J-G9 The empty boxes in the model number are for the cable length. The cable can be 1, 5, or 10 m long.
		Line-driver output type (High-speed type) for CJ1W-NC234/434	For 2 axis XW2Z-□□□J-G1 The empty boxes in the model number are for the cable length. The cable can be 1, 5, or 10 m long.
		Open collector output type (High-speed type) for CJ1W-NC214/NC414	For 1 axis XW2Z-□□□J-G13 The empty boxes in the model number are for the cable length. The cable can be 1, or 3 m long.
		Open collector output type (High-speed type) for CJ1W-NC214/NC414	For 2 axis XW2Z-□□□J-G5 The empty boxes in the model number are for the cable length. The cable can be 1, or 3 m long.

Note: Insert the cable length into the boxes in the model number of cables. (3 m: 003, 5 m: 005, 10 m: 010)

Symbol	Name		Connected to		Model
(7)	Servo Relay Units		Position Control Unit: For CJ1W-NC113/NC133 For CS1W-NC113/NC133 (For C200HW-NC113)	For 1 axis	XW2B-20J6-1B
			Position Control Unit: For CJ1W-NC213/NC233/NC413/NC433 For CS1W-NC213/NC233/NC413/NC433 (For C200HW-NC213/NC413)	For 2 axis	XW2B-40J6-2B
			For CJ1M-CPU21/CPU22/CPU23	For 1 axis	XW2B-20J6-8A
				For 2 axis	XW2B-40J6-9A
			For FQM1-MMA22 (Analog output) For FQM1-MMP22 (Pulse train output)	For 2 axis	XW2B-80J7-12A
(8)	Servo Relay Unit Cables for Servo Drives		Position Control Unit: For CJ1W-NC□□3, CS1W/C200HW-NC□□□ (XW2B-20J6-1B, XW2B-40J6-2B) For CQM1H-PLB21 (XW2B-20J6-3B)		XW2Z-□□□J-B25 The empty boxes in the model number are for the cable length. The cable can be 1, or 2 m long.
			For CJ1M-CPU21/CPU22/CPU23 (XW2B-20J6-8A, XW2B-40J6-9A)		XW2Z-□□□J-B31 The empty boxes in the model number are for the cable length. The cable can be 1, or 2 m long.
			For FQM1-MMA22 (Analog output) (XW2B-80J7-12A)		XW2Z-□□□J-B27 The empty boxes in the model number are for the cable length. The cable can be 1, or 2 m long.
			For FQM1-MMP22 (Pulse train output) (XW2B-80J7-12A)		XW2Z-□□□J-B26 The empty boxes in the model number are for the cable length. The cable can be 1, or 2 m long.
(9)	Connection Cables	Servo Relay Unit Cables for Position Control Units	CJ1W line-driver output type for CJ1W-NC133	For 1 axis	XW2Z-□□□J-A18 The empty boxes in the model number are for the cable length. The cable can be 0.5, or 1 m long.
			CJ1W line-driver output type for CJ1W-NC233/NC433	For 2 axis	XW2Z-□□□J-A19 The empty boxes in the model number are for the cable length. The cable can be 0.5, or 1 m long.
			CS1W line-driver output type for CS1W-NC133	For 1 axis	XW2Z-□□□J-A10 The empty boxes in the model number are for the cable length. The cable can be 0.5, or 1 m long.
			CS1W line-driver output type for CS1W-NC233/NC433	For 2 axis	XW2Z-□□□J-A11 The empty boxes in the model number are for the cable length. The cable can be 0.5, or 1 m long.
			CJ1W open collector output type for CJ1W-NC113	For 1 axis	XW2Z-□□□J-A14 The empty boxes in the model number are for the cable length. The cable can be 0.5, or 1 m long.
			CJ1W open collector output type for CJ1W-NC213/NC413	For 2 axis	XW2Z-□□□J-A15 The empty boxes in the model number are for the cable length. The cable can be 0.5, or 1 m long.
			CS1W/C200HW open collector output type for CS1W-NC113 for C200HW-NC113	For 1 axis	XW2Z-□□□J-A6 The empty boxes in the model number are for the cable length. The cable can be 0.5, or 1 m long.
			CS1W/C200HW open collector output type for CS1W-NC213/NC413 for C200HW-NC213/NC413	For 2 axis	XW2Z-□□□J-A7 The empty boxes in the model number are for the cable length. The cable can be 0.5, or 1 m long.
			CSW/C200HW open collector output type for CJ1M-CPU21/CPU22/CPU23	For 1 axis	XW2Z-□□□J-A33 The empty boxes in the model number are for the cable length. The cable can be 0.5, or 1 m long.

Note: Insert the cable length into the boxes in the model number of cables. (3 m: 003, 5 m: 005, 10 m: 010)

AC Servomotor/Drive OMNUC G5-series

Symbol		Name		Connected to			Model
(9)	Servo Relay Units/Connection Cables	Connection Cables	Servo Relay Unit Cables for Position Control Units	For FQM1-MMA22 (Analog output) For FQM1-MMP22 (Pulse train output)	General-purpose I/O (26 pin)	For 2 axis	XW2Z-□□□J-A28 The empty boxes in the model number are for the cable length. The cable can be 0.5, 1, or 2 m long.
				For FQM1-MMA22 (Analog output)	Special I/O (40 pin)	For 2 axis	XW2Z-□□□J-A31 The empty boxes in the model number are for the cable length. The cable can be 0.5, 1, or 2 m long.
				For FQM1-MMP22 (Pulse train output)	Special I/O (40 pin)	For 2 axis	XW2Z-□□□J-A30 The empty boxes in the model number are for the cable length. The cable can be 0.5, 1, or 2 m long.
				For CQM1H-PLB21		For 1 axis	XW2Z-□□□J-A3 The empty boxes in the model number are for the cable length. The cable can be 0.5, or 1 m long.
(10)	General-purpose Control Cables with Connector on One End			Cables for General-purpose Controllers			R88A-CPG□□□S The empty boxes in the model number are for the cable length. The cable can be 1 or 2 m long.
				Cables for General-Purpose Connection (Network Communication Type)			R88A-CPKB□□□S-E The empty boxes in the model number are for the cable length. The cable can be 1, or 2 m long.
(11)	For Connector Terminal Block	Connector Terminal Block Cables	Cable for General-purpose Controllers			XW2Z-□□□J-B24 The empty boxes in the model number are for the cable length. The cable can be 1, or 2 m long.	
			Cable for MECHATROLINK-II / EtherCAT Communications			XW2Z-□□□J-B34 The empty boxes in the model number are for the cable length. The cable can be 1, or 2 m long.	
(12)	For Connector Terminal Block	Connector-Terminal Block Conversion Units	Cable for General-purpose Controllers		M3 screws	XW2B-50G4	
					M3.5 screws	XW2B-50G5	
					M3 screws	XW2D-50G6	
			Cable for MECHATROLINK-II / EtherCAT Communications		M3 screws	XW2B-20G4	
					M3.5 screws	XW2B-20G5	
					M3 screws	XW2D-20G6	

Note: Insert the cable length into the boxes in the model number of cables. (3 m: 003, 5 m: 005, 10 m: 010)

External Encoder Cable (for CN4)

Symbol	Name	Lengths	Model
(13)	External Encoder Cable (CN4) Flexible Cable Type	5 m	R88A-CRKM005SR-E
		10 m	R88A-CRKM010SR-E
		20 m	R88A-CRKM020SR-E

Analog Monitor Cable (for CN5)

Symbol	Name	Lengths	Model
(14)	Analog Monitor Cable	1 m	R88A-CMK001S

USB Communication Cable (for CN7)

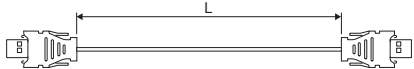
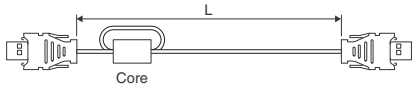
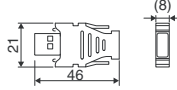
Symbol	Name	Lengths	Model
(15)	PC USB to Mini USB Connecting Cable with Ferrite	2 m	AX-CUSBM002-E

Note: Use a commercially available USB cable that is shield, equipped with a ferrite core for noise immunity, and Supporting for USB2.0. The Mini B type USB cable can be used.

Safety Cable (for CN8)

Symbol	Name	Lengths	Model
(16)	Safety Connector with Cable	3 m	R88A-CSK003S-E

MECHATROLINK-II Communication Cable

Symbol	Name	Length (L)	Model (OMRON model number)	Yaskawa model number	Description
(17)	MECHATROLINK-II Communication Cable * Can be connected to R88D-GN and R88D-KN only.	0.5m	FNY-W6002-A5	JEPMC-W6002-A5-E	(without ring core and USB connector on both ends) 
		1m	FNY-W6002-01	JEPMC-W6002-01-E	
		3m	FNY-W6002-03	JEPMC-W6002-03-E	
		5m	FNY-W6002-05	JEPMC-W6002-05-E	
	MECHATROLINK-II Communication Cable	0.5m	FNY-W6003-A5	JEPMC-W6003-A5	(with ring core and USB connector on both ends) 
		1m	FNY-W6003-01	JEPMC-W6003-01	
		3m	FNY-W6003-03	JEPMC-W6003-03	
		5m	FNY-W6003-05	JEPMC-W6003-05	
		10m	FNY-W6003-10	JEPMC-W6003-10	
		20m	FNY-W6003-20	JEPMC-W6003-20	
		30m	FNY-W6003-30	JEPMC-W6003-30	
(18)	MECHATROLINK-II Terminating resistance	—	FNY-W6022	JEPMC-W6022	

EtherCAT Communication Cable

Symbol	Name	Description
(19)	Ethernet Cable	EtherCAT Communication Cables <ul style="list-style-type: none"> • Use a category 5 or higher cable with double, aluminum tape and braided shielding. Connector (Modular Plug) Specifications • Use a category 5 or higher, shielded connector.

Servo Drive Connectors

Connectors	Description	Model
CN1	Control I/O Connector	Analog/Pulse Train Input Servodrive (R88D-KT□)
		Network Communications Servodrive (R88D-KN□)
CN2	Encoder Connector	R88A-CNW01R
CN4	External Encoder connector	R88A-CNK41L
CN8	Safety I/O Signal Connector	R88A-CNK81S
CNA	Main Circuit Power Supply Connector	[100VAC] 50W-400W [200VAC] 100W-1.5kW
		[200VAC] 2.0kW
		[400VAC] 600W-1.5kW
		[400VAC] 2.0kW
CNB	Servomotor Power Connector	[100VAC] 50W-400W [200VAC] 100W-1.5kW
		[400VAC] 600W-1.5kW
		[200VAC] 2.0kW
		[400VAC] 2.0kW
CNC	24Vdc Control Circuit Connector	[400VAC] 600W-2.0kW
CND	Regenerative Resistor Connector	[400VAC] 600W-1.5kW
		[200VAC] 2.0kW
		[400VAC] 2.0kW

Servomotor Connector

Description	Applicable Servomotor Capacity	Model
Servomotor Encoder Connector	[100 V/200 V] 3,000 r/min (50 to 750 W)	R88A-CNK02R
	[100 V/200 V] 3,000 r/min (1 to 5 kW), 2,000 r/min, 1,000 r/min [400 V] 3,000 r/min, 2,000 r/min, 1,000 r/min	R88A-CNK04R
	[100 V/200 V] 3,000 r/min (50 to 750 W)	R88A-CNK11A
Power cable connector	[200 V] [400V] 1,500 r/min (7.5 to 15kW) 1,000 r/min (6.0kW)	R88A-CNK21A-AP
	[100 V/200 V] 3,000 r/min (50 to 750 W)	R88A-CNK11B
Brake cable connector	[200 V] [400V] 1,500 r/min (7.5 to 15kW) 1,000 r/min (6.0kW)	R88A-CNK21B-AP

AC Servomotor/Drive OMNUC G5-series

About Manuals

Please read the relevant manuals of OMNUC G5-Series

English Cat. No.	Japanese Cat. No.	Type	Name
I571	SBCE-357	R88D-KT/R88M-K	OMNUC G5-SERIES AC SERVOMOTOR AND SERVO DRIVE USER'S MANUAL
I572	SBCE-358	R88D-KN□-ML2/R88M-K	OMNUC G5-SERIES MECHATROLINK-II Communications AC SERVOMOTOR AND SERVO DRIVE USER'S MANUAL
I576	SBCE-365	R88D-KN□-ECT/R88M-K	OMNUC G5-SERIES EtherCAT Communications AC SERVOMOTOR AND SERVO DRIVE USER'S MANUAL
W487	SBCE-359	CJ1W-NC□81/CJ1W-NC□82	CJ-series Position Control Unit Operation Manual
W446	SBCA-337	CXONE-AL□□C-V□/-AL□□D-V□	CX-Programmer Operation Manual
W453	SBCE-337	CXONE-AL□□C/D-V□ WS02-DRVC01	CX-Drive OPERATION MANUAL

Ordering Information

AC Servomotor/Drives Product name G5-series Pulse Train Input Type

Interpreting Model Numbers.....	36
■ Servo Drive Model Numbers	
■ Servomotor Model Numbers	
■ Understanding Decelerator Model Numbers (Backlash = 3' Max./Backlash = 15' Max.)	
Ordering Information.....	38
AC Servo Drives	38
AC Servomotors.....	38
Decelerators (Backlash = 3' Max./Backlash = 15' Max.)	40
Accessories and Cables.....	42
■ Connection Cables (Power Cables, Brake Cables, Encoder Cables) (Non-flexible Cables) (Flexible Cables)	
■ Cable/Connector	
■ Control Cables	
■ Peripheral Devices (External Regeneration Resistors, Reactors, Mounting Brackets)	
■ Support Software	
Combination table	47
■ Servo Drive and Servomotor Combinations	
■ Servomotor and Decelerator Combinations	
■ Controller Combinations	
■ Cable Combinations	
About Manuals	54
Read and Understand this Catalog	

AC Servomotor/Drive G5-series Pulse Train Input Type

Interpreting Model Numbers

Servo Drive Model Numbers

R88D-K P 01 H

(1) (2) (3) (4)

No	Item	Symbol	Specifications
(1)	G5-series Servo Drive		
(2)	Drive Type	P	Pulse train input type
(3)	Maximum Applicable Servomotor Capacity	01	100 W
		02	200 W
		04	400 W
		08	750 W
		10	1 kW
		15	1.5 kW
		20	2 kW
		30	3 kW
		50	5 kW
(4)	Power Supply Voltage	H	200 VAC

Servomotor Model Numbers

R88M-K E 100 30 H -BO S2

(1) (2) (3) (4) (5) (6)

No	Item	Symbol	Specifications
(1)	G5-series Servomotor		
(2)	Motor Type	E	Economy type
(3)	Servomotor Capacity	—	—
		050	50 W
		100	100 W
		200	200 W
		400	400 W
		750	750 W
		900	900 W
		1K0	1 kW
		1K5	1.5 kW
		2K0	2 kW
		3K0	3 kW
		4K0	4 kW
		5K0	5 kW
		10	1,000 r/min
		20	2,000 r/min
		30	3,000 r/min
(4)	Rated Rotation Speed		
(5)	Applied Voltage	H	200 VAC INC
(6)	Option	Blank	Straight shaft
		B	With brake
		O	With oil seal
		S2	With key and tap

Note: **INC** incremental encoder: 20bit

Understanding Decelerator Model Numbers (Backlash = 3' Max./Backlash = 15' Max.)

Backlash = 3' Max.

R88G-HPG 14A 05 100 S B J

(1) (2) (3) (4) (5) (6) (7)

No	Item	Symbol	Specifications
(1)	Decelerator for G□-Series Servomotors Backlash = 3' Max.		
(2)	Flange Size Number	11B	□40
		14A	□60
		20A	□90
		32A	□120
		50A	□170
		65A	□230
(3)	Gear Ratio	05	1/5
		09	1/9 (only frame number 11B)
		11	1/11 (except frame number 65A)
		20	1/20 (only frame number 65A)
		21	1/21 (except frame number 65A)
		25	1/25 (only frame number 65A)
		33	1/33
		45	1/45
(4)	Applicable Servomotor Capacity	050	50 W
		100	100 W
		200	200 W
		400	400 W
		750	750 W
		900	900 W
		1K0	1 kW
		1K5	1.5 kW
		2K0	2 kW
		3K0	3 kW
		4K0	4 kW
		5K0	5 kW
(5)	Motor Type	Blank	3,000-r/min cylindrical servomotors
		S	2,000-r/min cylindrical servomotors
		T	1,000-r/min cylindrical servomotors
(6)	Backlash	B	Backlash = 3' Max
(7)	Option	Blank	Straight shaft
		J	With key and tap

Backlash = 15' Max.

R88G-VRSF 09 B 100 C J

(1) (2) (3) (4) (5) (6) (7)

No	Item	Symbol	Specifications
(1)	Decelerator for G□-Series Servomotors Backlash = 15' Max.		
(2)	Gear Ratio	05	1/5
		09	1/9
		15	1/15
		25	1/25
(3)	Flange Size Number	B	□52
		C	□78
		D	□98
(4)	Applicable Servomotor Capacity	050	50 W
		100	100 W
		200	200 W
		400	400 W
		750	750 W
(5)	Motor Type	Blank	3,000-r/min cylindrical servomotors
		–	–
(6)	Backlash	C	Backlash = 15' Max
(7)	Option	J	With key (without tap)

AC Servomotor/Drive G5-series Pulse Train Input Type

Ordering Information

AC Servo Drives

Pulse train input type

Specifications		Model
Power Supply Voltage	Applicable Servomotor Capacity	
Single-phase 200VAC	100W	R88D-KP01H
	200W	R88D-KP02H
	400W	R88D-KP04H
	750W	R88D-KP08H
	1kW	R88D-KP10H
	1.5kW	R88D-KP15H
Three-phase 200VAC	2kW	R88D-KP20H
	3kW	R88D-KP30H
	5kW	R88D-KP50H

AC Servomotors

<Cylinder Type>

3,000-r/min servomotor

Specifications			Model
			Straight shaft with key and tap
	Voltage	Rated output	Without oil seals
Without brake	200 V	50 W	R88M-KE05030H-S2
		100 W	R88M-KE10030H-S2
		200 W	R88M-KE20030H-S2
		400 W	R88M-KE40030H-S2
		750 W	R88M-KE75030H-S2
		1 kW	R88M-KE1K030H-S2
		1.5 kW	R88M-KE1K530H-S2
		2 kW	R88M-KE2K030H-S2
		3 kW	R88M-KE3K030H-S2
		4 kW	R88M-KE4K030H-S2
		5 kW	R88M-KE5K030H-S2
With brake	200 V	50 W	R88M-KE05030H-BS2
		100 W	R88M-KE10030H-BS2
		200 W	R88M-KE20030H-BS2
		400 W	R88M-KE40030H-BS2
		750 W	R88M-KE75030H-BS2
		1 kW	R88M-KE1K030H-BS2
		1.5 kW	R88M-KE1K530H-BS2
		2 kW	R88M-KE2K030H-BS2
		3 kW	R88M-KE3K030H-BS2
		4 kW	R88M-KE4K030H-BS2
		5 kW	R88M-KE5K030H-BS2

Note: Models with oil seals are also available.

Specifications			Model
			Straight shaft without key
	Voltage	Rated output	Without oil seals
Without brake	200 V	50 W	R88M-KE05030H
		100 W	R88M-KE10030H
		200 W	R88M-KE20030H
		400 W	R88M-KE40030H
		750 W	R88M-KE75030H
		1 kW	R88M-KE1K030H
		1.5 kW	R88M-KE1K530H
		2 kW	R88M-KE2K030H
		3 kW	R88M-KE3K030H
		4 kW	R88M-KE4K030H
		5 kW	R88M-KE5K030H
With brake	200 V	50 W	R88M-KE05030H-B
		100 W	R88M-KE10030H-B
		200 W	R88M-KE20030H-B
		400 W	R88M-KE40030H-B
		750 W	R88M-KE75030H-B
		1 kW	R88M-KE1K030H-B
		1.5 kW	R88M-KE1K530H-B
		2 kW	R88M-KE2K030H-B
		3 kW	R88M-KE3K030H-B
		4 kW	R88M-KE4K030H-B
		5 kW	R88M-KE5K030H-B

Note: Models with oil seals are also available.

2,000-r/min servomotor

Specifications			Model
			Straight shaft with key and tap
	Voltage	Rated output	Without oil seals
Without brake	200 V	1kW	R88M-KE1K020H-S2
		1.5kW	R88M-KE1K520H-S2
		2kW	R88M-KE2K020H-S2
		3kW	R88M-KE3K020H-S2
		4kW	R88M-KE4K020H-S2
		5kW	R88M-KE5K020H-S2
With brake	200 V	1kW	R88M-KE1K020H-BS2
		1.5kW	R88M-KE1K520H-BS2
		2kW	R88M-KE2K020H-BS2
		3kW	R88M-KE3K020H-BS2
		4kW	R88M-KE4K020H-BS2
		5kW	R88M-KE5K020H-BS2

Note: Models with oil seals are also available.

Specifications			Model
			Straight shaft without key
	Voltage	Rated output	Without oil seals
Without brake	200 V	1kW	R88M-KE1K020H
		1.5kW	R88M-KE1K520H
		2kW	R88M-KE2K020H
		3kW	R88M-KE3K020H
		4kW	R88M-KE4K020H
		5kW	R88M-KE5K020H
With brake	200 V	1kW	R88M-KE1K020H-B
		1.5kW	R88M-KE1K520H-B
		2kW	R88M-KE2K020H-B
		3kW	R88M-KE3K020H-B
		4kW	R88M-KE4K020H-B
		5kW	R88M-KE5K020H-B

Note: Models with oil seals are also available.

1,000-r/min servomotor

Specifications			Model
			Straight shaft with key and tap
	Voltage	Rated output	Without oil seals
Without brake	200 V	900 W	R88M-KE90010H-S2
		2 kW	R88M-KE2K010H-S2
		3 kW	R88M-KE3K010H-S2
With brake	200 V	900 W	R88M-KE90010H-BS2
		2 kW	R88M-KE2K010H-BS2
		3 kW	R88M-KE3K010H-BS2

Note: Models with oil seals are also available.

Specifications			Model
			Straight shaft without key
	Voltage	Rated output	Without oil seals
Without brake	200 V	900 W	R88M-KE90010H
		2 kW	R88M-KE2K010H
		3 kW	R88M-KE3K010H
With brake	200 V	900 W	R88M-KE90010H-B
		2 kW	R88M-KE2K010H-B
		3 kW	R88M-KE3K010H-B

Note: Models with oil seals are also available.

AC Servomotor/Drive G5-series Pulse Train Input Type

Decelerators (Backlash = 3' Max./Backlash = 15' Max.)

Backlash = 3' Max
<Cylinder Type>

● 3,000-r/min servomotors

Straight shaft without key

Motor capacity	Gear Ratio	Model (Straight shaft)
50 W	1/5	R88G-HPG11B05100B
	1/9	R88G-HPG11B09050B
	1/21	R88G-HPG14A21100B
	1/33	R88G-HPG14A33050B
	1/45	R88G-HPG14A45050B
100 W	1/5	R88G-HPG11B05100B
	1/11	R88G-HPG14A11100B
	1/21	R88G-HPG14A21100B
	1/33	R88G-HPG20A33100B
	1/45	R88G-HPG20A45100B
200 W	1/5	R88G-HPG14A05200B
	1/11	R88G-HPG14A11200B
	1/21	R88G-HPG20A21200B
	1/33	R88G-HPG20A33200B
	1/45	R88G-HPG20A45200B
400 W	1/5	R88G-HPG14A05400B
	1/11	R88G-HPG20A11400B
	1/21	R88G-HPG20A21400B
	1/33	R88G-HPG32A33400B
	1/45	R88G-HPG32A45400B
750 W	1/5	R88G-HPG20A05750B
	1/11	R88G-HPG20A11750B
	1/21	R88G-HPG32A21750B
	1/33	R88G-HPG32A33750B
	1/45	R88G-HPG32A45750B
1 kW	1/5	R88G-HPG32A052K0B
	1/11	R88G-HPG32A112K0B
	1/21	R88G-HPG32A211K5B
	1/33	R88G-HPG50A332K0B
	1/45	R88G-HPG50A451K5B
1.5 kW	1/5	R88G-HPG32A052K0B
	1/11	R88G-HPG32A112K0B
	1/21	R88G-HPG32A211K5B
	1/33	R88G-HPG50A332K0B
	1/45	R88G-HPG50A451K5B
2 kW	1/5	R88G-HPG32A052K0B
	1/11	R88G-HPG32A112K0B
	1/21	R88G-HPG50A212K0B
	1/33	R88G-HPG50A332K0B
3 kW	1/5	R88G-HPG32A053K0B
	1/11	R88G-HPG50A113K0B
	1/21	R88G-HPG50A213K0B
4 kW	1/5	R88G-HPG32A054K0B
	1/11	R88G-HPG50A115K0B
5 kW	1/5	R88G-HPG50A055K0B
	1/11	R88G-HPG50A115K0B

Note: 1. The standard models have a straight shaft.

2. To order a Servomotor with a straight shaft with key, add "J" to the end of the model number, in the place indicated by the box.

● 2,000-r/min servomotors

Straight shaft without key

Motor capacity	Gear Ratio	Model (Straight shaft)
1 kW	1/5	R88G-HPG32A053K0B
	1/11	R88G-HPG32A112K0SB
	1/21	R88G-HPG32A211K0SB
	1/33	R88G-HPG50A332K0SB
	1/45	R88G-HPG50A451K0SB
1.5 kW	1/5	R88G-HPG32A053K0B
	1/11	R88G-HPG32A112K0SB
	1/21	R88G-HPG50A213K0B
	1/33	R88G-HPG50A332K0SB
2 kW	1/5	R88G-HPG32A053K0B
	1/11	R88G-HPG32A112K0SB
	1/21	R88G-HPG50A213K0B
	1/33	R88G-HPG50A332K0SB
3 kW	1/5	R88G-HPG32A054K0B
	1/11	R88G-HPG50A115K0B
	1/21	R88G-HPG50A213K0SB
4 kW	1/25	R88G-HPG65A253K0SB
	1/5	R88G-HPG50A055K0SB
	1/11	R88G-HPG50A115K0SB
	1/20	R88G-HPG65A205K0SB
5 kW	1/25	R88G-HPG65A255K0SB
	1/5	R88G-HPG50A055K0SB
	1/11	R88G-HPG50A115K0SB
	1/20	R88G-HPG65A205K0SB
	1/25	R88G-HPG65A255K0SB

Note: 1. The standard models have a straight shaft.

2. To order a Servomotor with a straight shaft with key, add "J" to the end of the model number, in the place indicated by the box.

● 1,000-r/min servomotors

Straight shaft without key

Motor capacity	Gear Ratio	Model (Straight shaft)
900 W	1/5	R88G-HPG32A05900TB
	1/11	R88G-HPG32A11900TB
	1/21	R88G-HPG50A21900TB
	1/33	R88G-HPG50A33900TB
2 kW	1/5	R88G-HPG32A052K0TB
	1/11	R88G-HPG50A112K0TB
	1/21	R88G-HPG50A212K0TB
	1/25	R88G-HPG65A255K0SB
3 kW	1/5	R88G-HPG50A055K0SB
	1/11	R88G-HPG50A115K0SB
	1/20	R88G-HPG65A205K0SB
	1/25	R88G-HPG65A255K0SB

Note: 1. The standard models have a straight shaft.
2. To order a Servomotor with a straight shaft with key, add "J" to the end of the model number, in the place indicated by the box.

Backlash = 15' Max
<Cylinder Type>

● 3,000-r/min servomotors

Straight shaft with key

Motor capacity	Gear Ratio	Model (Straight shaft)
50 W	1/5	R88G-VRSF05B100CJ
	1/9	R88G-VRSF09B100CJ
	1/15	R88G-VRSF15B100CJ
	1/25	R88G-VRSF25B100CJ
100 W	1/5	R88G-VRSF05B100CJ
	1/9	R88G-VRSF09B100CJ
	1/15	R88G-VRSF15B100CJ
	1/25	R88G-VRSF25B100CJ
200 W	1/5	R88G-VRSF05B200CJ
	1/9	R88G-VRSF09C200CJ
	1/15	R88G-VRSF15C200CJ
	1/25	R88G-VRSF25C200CJ
400 W	1/5	R88G-VRSF05C400CJ
	1/9	R88G-VRSF09C400CJ
	1/15	R88G-VRSF15C400CJ
	1/25	R88G-VRSF25C400CJ
750 W	1/5	R88G-VRSF05C750CJ
	1/9	R88G-VRSF09D750CJ
	1/15	R88G-VRSF15D750CJ
	1/25	R88G-VRSF25D750CJ

AC Servomotor/Drive G5-series Pulse Train Input Type

Accessories and Cables

■ Connection Cables (Power Cables, Brake Cables, Encoder Cables)

<Non-flexible Cables>

Power cable

Specifications		Without brake Model	With brake Model
[200 V] 3,000-r/min Servomotors of 50 to 750 W	3 m	R88A-CAGA003S	—
	5 m	R88A-CAGA005S	
	10 m	R88A-CAGA010S	
	15 m	R88A-CAGA015S	
	20 m	R88A-CAGA020S	
[200 V] 3,000-r/min Servomotors of 1 to 2 kW 2,000-r/min Servomotors of 1 to 2 kW 1,000-r/min Servomotors of 900 W	3 m	R88A-CAGB003S	R88A-CAGB003B
	5 m	R88A-CAGB005S	R88A-CAGB005B
	10 m	R88A-CAGB010S	R88A-CAGB010B
	15 m	R88A-CAGB015S	R88A-CAGB015B
	20 m	R88A-CAGB020S	R88A-CAGB020B
[200 V] 3,000-r/min Servomotors of 3 to 5 kW 2,000-r/min Servomotors of 3 to 5 kW 1,000-r/min Servomotors of 2 to 3 kW	3 m	R88A-CAGD003S	R88A-CAGD003B
	5 m	R88A-CAGD005S	R88A-CAGD005B
	10 m	R88A-CAGD010S	R88A-CAGD010B
	15 m	R88A-CAGD015S	R88A-CAGD015B
	20 m	R88A-CAGD020S	R88A-CAGD020B

Note: Different connectors are used for the motor power and the brake on 200-V, 3,000-r/min Servomotors of 50 to 750 W.
When using a Servomotor with a brake, two cables are required: a Power Cable without Brake and a Brake cable.

Brake Cable

Specifications		Model
[200 V] 3,000-r/min Servomotors of 50 to 750 W	3 m	R88A-CAGA003B
	5 m	R88A-CAGA005B
	10 m	R88A-CAGA010B
	15 m	R88A-CAGA015B
	20 m	R88A-CAGA020B

Encoder Cable

Specifications		Model
[200 V] 3,000-r/min Servomotors of 50 to 750 W	3 m	R88A-CRGB003C
	5 m	R88A-CRGB005C
	10 m	R88A-CRGB010C
	15 m	R88A-CRGB015C
	20 m	R88A-CRGB020C
[200 V] 3,000-r/min Servomotors of 1 to 5 kW 2,000-r/min Servomotors of 1 to 5 kW 1,000-r/min Servomotors of 900W to 3kW	3 m	R88A-CRGC003N
	5 m	R88A-CRGC005N
	10 m	R88A-CRGC010N
	15 m	R88A-CRGC015N
	20 m	R88A-CRGC020N

<Flexible Cables>

Power cable

Specifications		Without brake Model	With brake Model
[200 V] 3,000-r/min Servomotors of 50 to 750 W	3 m	R88A-CAGA003SR	-
	5 m	R88A-CAGA005SR	
	10 m	R88A-CAGA010SR	
	15 m	R88A-CAGA015SR	
	20 m	R88A-CAGA020SR	
[200 V] 3,000-r/min Servomotors of 1 to 2 kW 2,000-r/min Servomotors of 1 to 2 kW 1,000-r/min Servomotors of 900 W	3 m	R88A-CAGB003SR	R88A-CAGB003BR
	5 m	R88A-CAGB005SR	R88A-CAGB005BR
	10 m	R88A-CAGB010SR	R88A-CAGB010BR
	15 m	R88A-CAGB015SR	R88A-CAGB015BR
	20 m	R88A-CAGB020SR	R88A-CAGB020BR
[200 V] 3,000-r/min Servomotors of 3 to 5 kW 2,000-r/min Servomotors of 3 to 5 kW 1,000-r/min Servomotors of 2 to 3 kW	3 m	R88A-CAGD003SR	R88A-CAGD003BR
	5 m	R88A-CAGD005SR	R88A-CAGD005BR
	10 m	R88A-CAGD010SR	R88A-CAGD010BR
	15 m	R88A-CAGD015SR	R88A-CAGD015BR
	20 m	R88A-CAGD020SR	R88A-CAGD020BR

Note: Different connectors are used for the motor power and the brake on 200-V, 3,000-r/min Servomotors of 50 to 750 W .
When using a Servomotor with a brake, two cables are required: a Power Cable without Brake and a Brake cable.

Brake Cable

Specifications		Model
[200 V] 3,000-r/min Servomotors of 50 to 750 W	3 m	R88A-CAGA003BR
	5 m	R88A-CAGA005BR
	10 m	R88A-CAGA010BR
	15 m	R88A-CAGA015BR
	20 m	R88A-CAGA020BR

Encoder Cable

Specifications		Model
[200 V] 3,000-r/min Servomotors of 50 to 750 W	3 m	R88A-CRGB003CR
	5 m	R88A-CRGB005CR
	10 m	R88A-CRGB010CR
	15 m	R88A-CRGB015CR
	20 m	R88A-CRGB020CR
[200 V] 3,000-r/min Servomotors of 1 to 5 kW 2,000-r/min Servomotors of 1 to 5 kW 1,000-r/min Servomotors of 900W to 3kW	3 m	R88A-CRGC003NR
	5 m	R88A-CRGC005NR
	10 m	R88A-CRGC010NR
	15 m	R88A-CRGC015NR
	20 m	R88A-CRGC020NR

AC Servomotor/Drive G5-series Pulse Train Input Type

■ Cable/Connector Connector

Specifications	Model
Control I/O Connector (CN1)	R88A-CNU11C
Encoder Connector (CN2)	R88A-CNW01R

Servomotor Connector

Specifications	Model
Servomotor Connector for Encoder Cable	[200 V] 3,000 r/min (50 to 750 W) R88A-CNG02R
Power Cable Connector	(750 W max.) R88A-CNG01A
Brake Cable Connector	(750 W max.) R88A-CNG01B

Analog Monitor Cable

Name	Length	Model
Analog Monitor Cable	1 m	R88A-CMK001S

■ Control Cables

Control Cables(for Connector Terminal Block)

Name	Specifications	Model
Connector Terminal Block Cables	1m 2m	XW2Z-100J-B24 XW2Z-200J-B24
Connector Terminal Block Conversion Unit	M3 screws M3.5 screws M3 screws	XW2B-50G4 XW2B-50G5 XW2D-50G6

Connection Cables (for CN1)

Specifications Name	Unit	The number of axes	Length	Model
Position Control Unit (High-speed type) for Line-driver output	CJ1W-NC234/434	for 1 axis	1 m	XW2Z-100J-G9
			5 m	XW2Z-500J-G9
			10 m	XW2Z-10MJ-G9
		for 2 axis	1 m	XW2Z-100J-G1
			5 m	XW2Z-500J-G1
			10 m	XW2Z-10MJ-G1
Position Control Unit (High-speed type) for Open collector output	CJ1W-NC214/NC414	for 1 axis	1 m	XW2Z-100J-G13
			3 m	XW2Z-300J-G13
		for 2 axis	1 m	XW2Z-100J-G5
			3 m	XW2Z-300J-G5
General-purpose Control Connector on One End		—	1 m	R88A-CPG001S
		—	2 m	R88A-CPG002S

Servo Relay Units (for CN1)

Specifications	The number of axes	Model
Position Control Unit: For CJ1W-NC113/NC133 For CS1W-NC113/NC133 For C200HW-NC113	for 1 axis	XW2B-20J6-1B
Position Control Unit: For CJ1W-NC213/NC233/NC413/NC433 For CS1W-NC213/NC233/NC413/NC433 For C200HW-NC213/NC413	for 2 axis	XW2B-40J6-2B
For CJ2M-CPU31/CPU32/CPU33/CPU34/CPU35 For CJ2M-CPU11/CPU12/CPU13/CPU14/CPU15	for 1 axis	XW2B-20J6-8A
	for 2 axis	XW2B-40J6-9A
For FQM1-MMP22 (Pulse train output)	for 2 axis	XW2B-80J7-12A
For CQM1-CPU43-V1	for 1 axis	XW2B-20J6-3B

Servo Relay Unit cable (for Servo Drive/CN1)

Specifications	Length	Model
Position Control Unit: For CJ1W-NC□□□3□ For CS1W/C200HW-NC□□□□ (XW2B-20J6-1B, XW2B-40J6-2B)	1 m	XW2Z-100J-B25
	2 m	XW2Z-200J-B25
For CJ2M-CPU31/CPU32/CPU33/CPU34/CPU35 For CJ2M-CPU11/CPU12/CPU13/CPU14/CPU15 (XW2B-20J6-8A, XW2B-40J6-9A)	1 m	XW2Z-100J-B31
	2 m	XW2Z-200J-B31
For FQM1-MMP22 (Pulse train output) (XW2B-80J7-12A)	1 m	XW2Z-100J-B26
	2 m	XW2Z-200J-B26

Servo Relay Unit cable (for Position Control Unit)

Specifications	The number of axes	Length	Model
CS1W/C200HW open collector output type For CS1W-NC113 For C200HW-NC113 (XW2B-20J6-1B)	for 1 axis	0.5 m	XW2Z-050J-A6
		1 m	XW2Z-100J-A6
CS1W/C200HW open collector output type For CS1W-NC213/NC413 For C200HW-NC213/NC413 (XW2B-40J6-2B)	for 2 axis	0.5 m	XW2Z-050J-A7
		1 m	XW2Z-100J-A7
CS1W line-driver output type For CS1W-NC133 (XW2B-20J6-1B)	for 1 axis	0.5 m	XW2Z-050J-A10
		1 m	XW2Z-100J-A10
CS1W line-driver output type For CS1W-NC233/NC433 (XW2B-40J6-2B)	for 2 axis	0.5 m	XW2Z-050J-A11
		1 m	XW2Z-100J-A11
CJ1W open collector output type For CJ1W-NC113 (XW2B-20J6-1B)	for 1 axis	0.5 m	XW2Z-050J-A14
		1 m	XW2Z-100J-A14
CJ1W open collector output type For CJ1W-NC213/NC413 (XW2B-40J6-2B)	for 2 axis	0.5 m	XW2Z-050J-A15
		1 m	XW2Z-100J-A15
CJ1W line-driver output type For CJ1W-NC133 (XW2B-20J6-1B)	for 1 axis	0.5 m	XW2Z-050J-A18
		1 m	XW2Z-100J-A18
CJ1W line-driver output type For CJ1W-NC233/NC433 (XW2B-40J6-2B)	for 2 axis	0.5 m	XW2Z-050J-A19
		1 m	XW2Z-100J-A19
CJ1M open collector output type For CJ2M-CPU31/CPU32/CPU33/CPU34/CPU35 For CJ2M-CPU11/CPU12/CPU13/CPU14/CPU15 (XW2B-20J6-8A, XW2B-40J6-9A)	for 1 axis	0.5 m	XW2Z-050J-A33
		1 m	XW2Z-100J-A33
For FQM1-MMP22 (Pulse train output) (XW2B-80J7-12A)	General purpose I/O (26 pin)	0.5 m	XW2Z-050J-A28
		1 m	XW2Z-100J-A28
		2 m	XW2Z-200J-A28
	Special I/O (40 pin)	0.5 m	XW2Z-050J-A30
		1 m	XW2Z-100J-A30
		2 m	XW2Z-200J-A30

AC Servomotor/Drive

G5-series Pulse Train Input Type

■ Peripheral Devices (External Regeneration Resistors, Reactors, Mounting Brackets)

External Regeneration Resistors

Specifications	Model
80 W 50 Ω	R88A-RR08050S
80 W 100 Ω	R88A-RR080100S
220 W 47 Ω	R88A-RR22047S1
500 W 20 Ω	R88A-RR50020S

Reactors

Specifications	Model
R88D-KP01H(For single-phase input)	3G3AX-DL2002
R88D-KP02H(For single-phase input)	3G3AX-DL2004
R88D-KP04H(For single-phase input)	3G3AX-DL2007
R88D-KP08H/-KP10H(For single-phase input)	3G3AX-DL2015
R88D-KP15H(For single-phase input)	3G3AX-DL2022
R88D-KP01H/-KP02H/-KP04H/KP08H/-KP10H/-KP15H(For three-phase input)	3G3AX-AL2025
R88D-KP20H/-KP30H	3G3AX-AL2055
R88D-KP50H	3G3AX-AL2110

Mounting Brackets (L Brackets for Rack Mounting)

Specifications	Model
R88D-KP01H/-KP02H	R88A-TK01K
R88D-KP04H	R88A-TK02K
R88D-KP08H	R88A-TK03K
R88D-KP10H/-KP15H	R88A-TK04K

■ Software

FA Integrated Tool Package CX-One

Product name	Specifications	Number of licenses	Media	Model	Standards
FA Integrated Tool Package CX-One Ver. 4.□	<p>The CX-One is a comprehensive software package that integrates Support Software for OMRON PLCs and components.</p> <p>CX-One runs on following OS. OS: Windows XP (Service Pack 3 or higher), Vista or 7 Note: Except for Windows XP 64-bit version.</p> <p>CX-One Version.4.□ includes CX-Drive Ver.2.□. For details, refer to the CX-One catalog (Cat.No.R134).</p>	1 license *1	DVD *2	CXONE-AL01D-V4	—

*1. Multi licenses are available for the CX-One (3, 10, 30, or 50 licenses).

*2. The CX-One is also available on CD (CXONE-AL□□C-V4).

Combination table

Servo Drive and Servomotor Combinations (3,000 r/min, 2,000 r/min, 1,000 r/min)

<Cylinder Type>

● 3,000-r/min servomotors

Power Supply Voltage	Servo Drive Model Numbers	Servomotor Model Numbers	
		Output	With incremental encoder
Single-phase/ three-phase 200VAC	R88D-KP01H *	50 W *	R88M-KE05030H-□ *
	R88D-KP01H	100 W	R88M-KE10030H-□
	R88D-KP02H	200 W	R88M-KE20030H-□
	R88D-KP04H	400 W	R88M-KE40030H-□
	R88D-KP08H	750 W	R88M-KE75030H-□
	R88D-KP15H *	1 kW *	R88M-KE1K030H-□ *
Three-phase 200VAC	R88D-KP15H	1.5 kW	R88M-KE1K530H-□
	R88D-KP20H	2 kW	R88M-KE2K030H-□
	R88D-KP30H	3 kW	R88M-KE3K030H-□
	R88D-KP50H*	4 kW *	R88M-KE4K030H-□ *
	R88D-KP50H	5 kW	R88M-KE5K030H-□

* Please note the capacity of Servo Drive and Servomotor are not same in this combination.

● 2,000-r/min servomotors

Power Supply Voltage	Servo Drive Model Numbers	Servomotor Model Numbers	
		Output	With incremental encoder
Single-phase/ three-phase 200VAC	R88D-KP10H	1 kW	R88M-KE1K020H-□
	R88D-KP15H	1.5 kW	R88M-KE1K520H-□
Three-phase 200VAC	R88D-KP20H	2 kW	R88M-KE2K020H-□
	R88D-KP30H	3 kW	R88M-KE3K020H-□
	R88D-KP50H *	4 kW *	R88M-KE4K020H-□ *
	R88D-KP50H	5 kW	R88M-KE5K020H-□

* Please note the capacity of Servo Drive and Servomotor are not same in this combination.

● 1,000-r/min servomotors

Power Supply Voltage	Servo Drive Model Numbers	Servomotor Model Numbers	
		Output	With incremental encoder
Single-phase/ three-phase 200VAC	R88D-KP15H *	900 W *	R88M-KE90010H-□ *
Three-phase 200VAC	R88D-KP30H *	2 kW *	R88M-KE2K010H-□ *
	R88D-KP50H *	3 kW *	R88M-KE3K010H-□ *

* Please note the capacity of Servo Drive and Servomotor are not same in this combination.

AC Servomotor/Drive G5-series Pulse Train Input Type

Servomotor and Decelerator Combinations (3,000 r/min, 2,000 r/min, 1,000 r/min)

<Cylinder Type>

● 3,000-r/min servomotors

Motor model	1/5	1/11 (1/9 for flange size No.11)	1/21	1/33	1/45
R88M-KE05030□	R88G-HPG11B05100B□ (Also used with R88M-KE10030□)	R88G-HPG11B09050B□ (Gear ratio 1/9)	R88G-HPG14A21100B□ (Also used with R88M-KE10030□)	R88G-HPG14A33050B□	R88G-HPG14A45050B□
R88M-KE10030□	R88G-HPG11B05100B□	R88G-HPG14A11100B□	R88G-HPG14A21100B□	R88G-HPG20A33100B□	R88G-HPG20A45100B□
R88M-KE20030□	R88G-HPG14A05200B□	R88G-HPG14A11200B□	R88G-HPG20A21200B□	R88G-HPG20A33200B□	R88G-HPG20A45200B□
R88M-KE40030□	R88G-HPG14A05400B□	R88G-HPG20A11400B□	R88G-HPG20A21400B□	R88G-HPG32A33400B□	R88G-HPG32A45400B□
R88M-KE75030□	R88G-HPG20A05750B□	R88G-HPG20A11750B□	R88G-HPG32A21750B□	R88G-HPG32A33750B□	R88G-HPG32A45750B□
R88M-KE1K030□	R88G-HPG32A052K0B□ (Also used with R88M-KE2K030□)	R88G-HPG32A112K0B□ (Also used with R88M-KE2K030□)	R88G-HPG32A211K5B□ (Also used with R88M-KE1K5030□)	R88G-HPG50A332K0B□ (Also used with R88M-KE2K030□)	R88G-HPG50A451K5B□ (Also used with R88M-KE1K530□)
R88M-KE1K530□	R88G-HPG32A052K0B□ (Also used with R88M-KE2K030□)	R88G-HPG32A112K0B□ (Also used with R88M-KE2K030□)	R88G-HPG32A211K5B□	R88G-HPG50A332K0B□ (Also used with R88M-KE2K030□)	R88G-HPG50A451K5B□
R88M-KE2K030□	R88G-HPG32A052K0B□	R88G-HPG32A112K0B□	R88G-HPG50A212K0B□	R88G-HPG50A332K0B□	—
R88M-KE3K030□	R88G-HPG32A053K0B□	R88G-HPG50A113K0B□	R88G-HPG50A213K0B□	—	—
R88M-KE4K030□	R88G-HPG32A054K0B□	R88G-HPG50A115K0B□ (Also used with R88M-KE5K030□)	—	—	—
R88M-KE5K030□	R88G-HPG50A055K0B□	R88G-HPG50A115K0B□	—	—	—

● 2,000-r/min servomotors

Motor model	1/5	1/11	1/21 (1/20 for flange size No.65)	1/33 (1/25 for flange size No.65)	1/45
R88M-KE1K020□	R88G-HPG32A053K0B□ (Also used with R88M-KE3K030□)	R88G-HPG32A112K0SB□ (Also used with R88M-KE2K020□)	R88G-HPG32A211K0SB□	R88G-HPG50A332K0SB□ (Also used with R88M-KE2K020□)	R88G-HPG50A451K0SB□
R88M-KE1K520□	R88G-HPG32A053K0B□ (Also used with R88M-KE3K030□)	R88G-HPG32A112K0SB□ (Also used with R88M-KE2K020□)	R88G-HPG50A213K0B□ (Also used with R88M-KE3K030□)	R88G-HPG50A332K0SB□ (Also used with R88M-KE2K020□)	—
R88M-KE2K020□	R88G-HPG32A053K0B□ (Also used with R88M-KE3K030□)	R88G-HPG32A112K0SB□	R88G-HPG50A213K0B□ (Also used with R88M-KE3K030□)	R88G-HPG50A332K0SB□	—
R88M-KE3K020□	R88G-HPG32A054K0B□ (Also used with R88M-KE4K030□)	R88G-HPG50A115K0B□ (Also used with R88M-KE5K030□)	R88G-HPG50A213K0SB□	R88G-HPG65A253K0SB□	—
R88M-KE4K020□	R88GHPG50A055K0SB□ (Also used with R88M-KE5K020□)	R88G-HPG50A115K0SB□ (Also used with R88M-KE3K030□)	R88G-HPG65A205K0SB□ (Also used with R88M-KE3K030□)	R88G-HPG65A255K0SB□ (Also used with R88M-KE5K020□)	—
R88M-KE5K020□	R88GHPG50A055K0SB□	R88G-HPG50A115K0SB□	R88G-HPG65A205K0SB□	R88G-HPG65A255K0SB□	—

● 1,000-r/min servomotors

Motor model	1/5	1/11	1/21 (1/20 for flange size No.65)	1/33 (1/25 for flange size No.65)
R88M-KE90010□	R88G-HPG32A05900TB□	R88G-HPG32A11900TB□	R88G-HPG50A21900TB□	R88G-HPG50A33900TB□
R88M-KE2K010□	R88G-HPG32A052K0TB□	R88G-HPG50A112K0TB□	R88G-HPG50A212K0TB□ (Also used with R88M-KE5K020□)	R88G-HPG65A255K0SB□ (Also used with R88M-KE5K020□)
R88M-KE3K010□	R88G-HPG50A055K0SB□ (Also used with R88M-KE5K020□)	R88G-HPG50A115K0SB□ (Also used with R88M-KE5K020□)	R88G-HPG65A205K0SB□ (Also used with R88M-KE5K020□)	R88G-HPG65A255K0SB□ (Also used with R88M-KE5K020□)

Controller Combinations

● Servo Relay Units and Cables

Select the Servo Relay Unit and Cable according to the model number of the Position Control Unit being used.

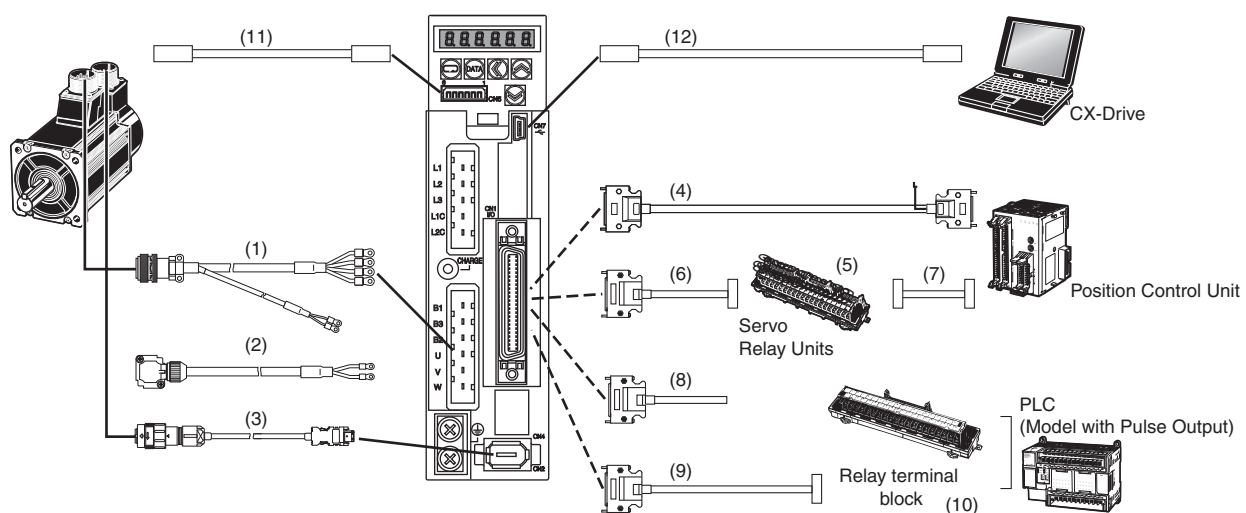
Position Control Unit	Position Control Unit Cable		Servo Relay Unit		Servo Drive Cable
CS1W-NC113	XW2Z-□□□J-A6		XW2B-20J6-1B		XW2Z-□□□J-B25
C200HW-NC113					
CS1W-NC213	XW2Z-□□□J-A7		XW2B-40J6-2B		
CS1W-NC413					
C200HW-NC213					
C200HW-NC413					
CS1W-NC133	XW2Z-□□□J-A10		XW2B-20J6-1B		
CS1W-NC233	XW2Z-□□□J-A11		XW2B-40J6-2B		
CS1W-NC433					
CJ1W-NC113	XW2Z-□□□J-A14		XW2B-20J6-1B		
CJ1W-NC213	XW2Z-□□□J-A15		XW2B-40J6-2B		
CJ1W-NC413					
CJ1W-NC133	XW2Z-□□□J-A18		XW2B-20J6-1B		
CJ1W-NC233	XW2Z-□□□J-A19		XW2B-40J6-2B		
CJ1W-NC433					
CJ2M-CPU31 CJ2M-CPU32 CJ2M-CPU33 CJ2M-CPU34 CJ2M-CPU35 CJ2M-CPU11 CJ2M-CPU12 CJ2M-CPU13 CJ2M-CPU14 CJ2M-CPU15	XW2Z-□□□J-A33		For 1 axis	XW2B-20J6-8A	XW2Z-□□□J-B31
			For 2 axis	XW2B-40J6-9A	
FQM1-MMP22	General purpose I/O	XW2Z-□□□J-A28	XW2B-80J7-12A		XW2Z-□□□J-B26
	Special I/O	XW2Z-□□□J-A30			

- Note:** 1. Insert the cable length into the boxes in the model number (□□□). Position Control Unit cables come in two lengths: 0.5 m and 1 m (some are also available in lengths of 2 m). Servo Driver Cables also come in two lengths: 1 m and 2 m.
2. Two Servo Driver Cables are required if 2-axis control is performed using one Position Control Unit.
3. Direct cable is available for CJ1W-NC□□4 Position Control Unit (High-Speed type).

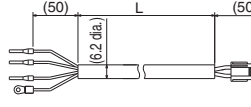
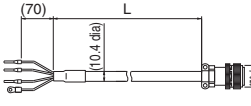
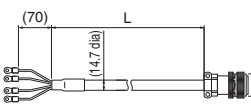
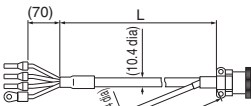
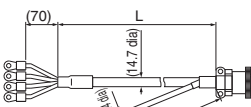
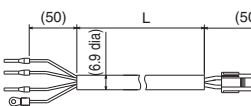
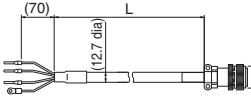
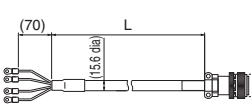
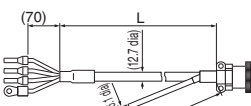

Specifications	The number of axes	Model
For CJ1W-NC214/-NC414 (open collector output type)	1 axis	XW2Z-□□□J-G13
For CJ1W-NC214/-NC414 (open collector output type)	2 axis	XW2Z-□□□J-G5
For CJ1W-NC234/-NC434 (line-driver output type)	1 axis	XW2Z-□□□J-G9
For CJ1W-NC234/-NC434 (line-driver output type)	2 axis	XW2Z-□□□J-G1

AC Servomotor/Drive G5-series Pulse Train Input Type

Cable Combinations



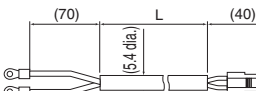
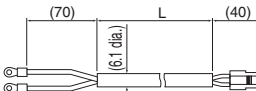
Servomotor Power Cables (For CNB)

Symbol		Name	Connected to	Model	Description
(1)	Non-flexible Cables	Without Brakes	Power Cables for Servomotors without Brakes	[200 V] Cylindrical Servomotors, 3,000 r/min, 50 to 750 W	R88A-CAGA□□□S The empty boxes in the model number are for the cable length. The cable can be 3, 5, 10, 15, or 20 m long. 
				[200 V] Cylindrical Servomotors, 3,000 r/min, 1 to 2 kW Cylindrical Servomotors, 2,000 r/min, 1 to 2 kW Cylindrical Servomotors, 1,000 r/min, 900 W	R88A-CAGB□□□S The empty boxes in the model number are for the cable length. The cable can be 3, 5, 10, 15, or 20 m long. 
				[200 V] Cylindrical Servomotors, 3,000 r/min, 3 to 5 kW Cylindrical Servomotors, 2,000 r/min, 3 to 5 kW Cylindrical Servomotors, 1,000 r/min, 2 to 3 kW	R88A-CAGD□□□S The empty boxes in the model number are for the cable length. The cable can be 3, 5, 10, 15, or 20 m long. 
		With Brakes	Power Cables for Servomotors with Brakes	Note: Different connectors are used for the motor power and the brake on 200-V, 3,000-r/min Servomotors of 50 to 750 W. When using a Servomotor with a brake, two cables are required: a Power Cable without Brake and a Brake Cable.	
				[200 V] Cylindrical Servomotors, 3,000 r/min, 1 to 2 kW Cylindrical Servomotors, 2,000 r/min, 1 to 2 kW Cylindrical Servomotors, 1,000 r/min, 900 W	R88A-CAGB□□□B The empty boxes in the model number are for the cable length. The cable can be 3, 5, 10, 15, or 20 m long. 
				[200 V] Cylindrical Servomotors, 3,000 r/min, 3 to 5 kW Cylindrical Servomotors, 2,000 r/min, 3 to 5 kW Cylindrical Servomotors, 1,000 r/min, 2 to 3 kW	R88A-CAGD□□□B The empty boxes in the model number are for the cable length. The cable can be 3, 5, 10, 15, or 20 m long. 
	Flexible Cables	Without Brakes	Power Cables for Servomotors without Brakes	[200 V] Cylindrical Servomotors, 3,000 r/min, 50 to 750 W	R88A-CAGA□□□SR The empty boxes in the model number are for the cable length. The cable can be 3, 5, 10, 15, or 20 m long. 
				[200 V] Cylindrical Servomotors, 3,000 r/min, 1 to 2 kW Cylindrical Servomotors, 2,000 r/min, 1 to 2 kW	R88A-CAGB□□□SR The empty boxes in the model number are for the cable length. The cable can be 3, 5, 10, 15, or 20 m long. 
				[200 V] Cylindrical Servomotors, 3,000 r/min, 3 to 5 kW Cylindrical Servomotors, 2,000 r/min, 3 to 5 kW Cylindrical Servomotors, 1,000 r/min, 2 to 3 kW	R88A-CAGD□□□SR The empty boxes in the model number are for the cable length. The cable can be 3, 5, 10, 15, or 20 m long. 
(1)	Flexible Cables	With Brakes	Power Cables for Servomotors with Brakes	Note: Different connectors are used for the motor power and the brake on 200-V, 3,000-r/min Servomotors of 50 to 750 W. When using a Servomotor with a brake, two cables are required: a Power Cable without Brake and a Brake Cable.	
				[200 V] Cylindrical Servomotors, 3,000 r/min, 1 to 2 kW Cylindrical Servomotors, 2,000 r/min, 1 to 2 kW Cylindrical Servomotors, 1,000 r/min, 900 W	R88A-CAGB□□□BR The empty boxes in the model number are for the cable length. The cable can be 3, 5, 10, 15, or 20 m long. 
				[200 V] Cylindrical Servomotors, 3,000 r/min, 3 to 5 kW Cylindrical Servomotors, 2,000 r/min, 3 to 5 kW Cylindrical Servomotors, 1,000 r/min, 2 to 3 kW	R88A-CAGD□□□BR The empty boxes in the model number are for the cable length. The cable can be 3, 5, 10, 15, or 20 m long. 

Note: Insert the cable length into the boxes in the model number of cables. (3 m: 003, 5 m: 005, 10 m: 010)

AC Servomotor/Drive G5-series Pulse Train Input Type

Brake Cables

Symbol		Name	Connected to	Model	Description
(2)	Non-flexible Cables	Brake Cables	[200 V] Cylindrical Servomotors, 3,000 r/min, 50 to 750 W	R88A-CAGA□□□B The empty boxes in the model number are for the cable length. The cable can be 3, 5, 10, 15, or 20 m long.	 [Servomotor Connector] Connector: 172157-1 (Tyco Electronics AMP KK) Connector pins: 170362-1 (Tyco Electronics AMP KK) 170366-1 (Tyco Electronics AMP KK)
	Flexible Cables	Brake Cables	[200 V] Cylindrical Servomotors, 3,000 r/min, 50 to 750 W	R88A-CAGA□□□BR The empty boxes in the model number are for the cable length. The cable can be 3, 5, 10, 15, or 20 m long.	 [Servomotor Connector] Connector: 172157-1 (Tyco Electronics AMP KK) Connector pins: 170362-1 (Tyco Electronics AMP KK) 170366-1 (Tyco Electronics AMP KK)

Note: Insert the cable length into the boxes in the model number of cables. (3 m: 003, 5 m: 005, 10 m: 010)

Encoder Cables (for CN2)

Symbol	Name	Connected to	Model	Description
(3)	Non-flexible Cables	Encoder Cables with Connectors		
	Flexible Cables	Encoder Cables with Connectors		

Note: Insert the cable length into the boxes in the model number of cables. (3 m: 003, 5 m: 005, 10 m: 010)

AC Servomotor/Drive G5-series Pulse Train Input Type

Symbol	Name		Connected to		Model	
(4)	Control Cables	Direct connection cable for Position Control Unit (High-speed type)	Line-driver output type (High-speed type) for CJ1W-NC234/434	For 1 axis	XW2Z-□□□J-G9 The empty boxes in the model number are for the cable length. The cable can be 1, 5, or 10 m long.	
			Line-driver output type (High-speed type) for CJ1W-NC234/434	For 2 axis	XW2Z-□□□J-G1 The empty boxes in the model number are for the cable length. The cable can be 1, 5, or 10 m long.	
			Open collector output type (High-speed type) for CJ1W-NC214/NC414	For 1 axis	XW2Z-□□□J-G13 The empty boxes in the model number are for the cable length. The cable can be 1, or 3 m long.	
			Open collector output type (High-speed type) for CJ1W-NC214/NC414	For 2 axis	XW2Z-□□□J-G5 The empty boxes in the model number are for the cable length. The cable can be 1, or 3 m long.	
(5)	Servo Relay Units/Connection Cables	Servo Relay Units	Position Control Unit: For CJ1W-NC113/NC133 For CS1W-NC113/NC133 (For C200HW-NC113)	For 1 axis	XW2B-20J6-1B	
			Position Control Unit: For CJ1W-NC213/NC233/NC413/NC433 For CS1W-NC213/NC233/NC413/NC433 (For C200HW-NC213/NC413)	For 2 axis	XW2B-40J6-2B	
			For CJ1M-CPU21/CPU22/CPU23	For 1 axis	XW2B-20J6-8A	
				For 2 axis	XW2B-40J6-9A	
For FQM1-MMP22 (Pulse train output)	For 2 axis	XW2B-80J7-12A				
(6)	Servo Relay Units/Connection Cables	Connection Cables	Servo Relay Unit Cables for Servo Drives	Position Control Unit: For CJ1W-NC□□3, CS1W/C200HW-NC□□□ (XW2B-20J6-1B, XW2B-40J6-2B)	XW2Z-□□□J-B25 The empty boxes in the model number are for the cable length. The cable can be 1, or 2 m long.	
				For CJ1M-CPU21/CPU22/CPU23 (XW2B-20J6-8A, XW2B-40J6-9A)	XW2Z-□□□J-B31 The empty boxes in the model number are for the cable length. The cable can be 1, or 2 m long.	
				For FQM1-MMP22 (Pulse train output) (XW2B-80J7-12A)	XW2Z-□□□J-B26 The empty boxes in the model number are for the cable length. The cable can be 1, or 2 m long.	
(7)	Servo Relay Units/Connection Cables	Connection Cables	Servo Relay Unit Cables for Position Control Units	CJ1W line-driver output type for CJ1W-NC133	For 1 axis	XW2Z-□□□J-A18 The empty boxes in the model number are for the cable length. The cable can be 0.5, or 1 m long.
				CJ1W line-driver output type for CJ1W-NC233/NC433	For 2 axis	XW2Z-□□□J-A19 The empty boxes in the model number are for the cable length. The cable can be 0.5, or 1 m long.
				CS1W line-driver output type for CS1W-NC133	For 1 axis	XW2Z-□□□J-A10 The empty boxes in the model number are for the cable length. The cable can be 0.5, or 1 m long.
				CS1W line-driver output type for CS1W-NC233/NC433	For 2 axis	XW2Z-□□□J-A11 The empty boxes in the model number are for the cable length. The cable can be 0.5, or 1 m long.
				CJ1W open collector output type for CJ1W-NC113	For 1 axis	XW2Z-□□□J-A14 The empty boxes in the model number are for the cable length. The cable can be 0.5, or 1 m long.
				CJ1W open collector output type for CJ1W-NC213/NC413	For 2 axis	XW2Z-□□□J-A15 The empty boxes in the model number are for the cable length. The cable can be 0.5, or 1 m long.
				CS1W/C200HW open collector output type for CS1W-NC113 for C200HW-NC113	For 1 axis	XW2Z-□□□J-A6 The empty boxes in the model number are for the cable length. The cable can be 0.5, or 1 m long.
				CS1W/C200HW open collector output type for CS1W-NC213/NC413 for C200HW-NC213/NC413	For 2 axis	XW2Z-□□□J-A7 The empty boxes in the model number are for the cable length. The cable can be 0.5, or 1 m long.

Note: Insert the cable length into the boxes in the model number of cables. (3 m: 003, 5 m: 005, 10 m: 010)

System Configuration

AC Servo Drive

AC Servomotor

Ordering Information

AC Servomotor/Drive G5-series Pulse Train Input Type

Symbol		Name		Connected to			Model
(7)	Servo Relay Units/Connection Cables	Connection Cables	Servo Relay Unit Cables for Position Control Units	CSW/C200HW open collector output type for CJ2M-CPU31/CPU32/CPU33/CPU34/CPU35 for CJ2M-CPU11/CPU12/CPU13/CPU14/CPU15		For 1 axis	XW2Z-□□□J-A33 The empty boxes in the model number are for the cable length. The cable can be 0.5, or 1 m long.
				For FQM1-MMP22 (Pulse train output)	General-purpose I/O (26 pin)	For 2 axis	XW2Z-□□□J-A28 The empty boxes in the model number are for the cable length. The cable can be 0.5, 1, or 2 m long.
				For FQM1-MMP22 (Pulse train output)	Special I/O (40 pin)	For 2 axis	XW2Z-□□□J-A30 The empty boxes in the model number are for the cable length. The cable can be 0.5, 1, or 2 m long.
(8)	General-purpose Control Cables with Connector on One End			Cables for General-purpose Controllers			R88A-CPG□□□S The empty boxes in the model number are for the cable length. The cable can be 1, or 2 m long.
(9)	For Connector Terminal Block		Connector Terminal Block Cables	Cable for General-purpose Controllers			XW2Z-□□□J-B24 The empty boxes in the model number are for the cable length. The cable can be 1, or 2 m long.
Connector-Terminal Block Conversion Units			Cable for General-purpose Controllers		M3 screws	XW2B-50G4	
					M3.5 screws	XW2B-50G5	
(10)				M3 screws		XW2D-50G6	

Note: Insert the cable length into the boxes in the model number of cables. (3 m: 003, 5 m: 005, 10 m: 010)

Monitor Connector (for CN5)

Symbol	Name	Lengths	Model
(11)	Analog Monitor Cable	1 m	R88A-CMK001S

Communications Connector (for CN7)

Symbol	Name	Description
(12)	USB communications cable	General purpose USB cable can be used

Note: Use a commercially available USB cable that is shield, equipped with a ferrite core for noise immunity, and Supporting for USB2.0. The Mini B type USB cable can be used.

Connectors

Connectors	Name	Model
CN1	Control I/O Connector (General-purpose Input)	R88A-CNU11C
CN2	Encoder Connector	R88A-CNW01R

Servomotor Connector

Connectors	Name	Connected to	Model
—	Motor connector for encoder cable	3,000 r/min, 50 to 750 W	R88A-CNG02R
—	Power cable connector	750 W max. (100 V/200 V)	R88A-CNG01A
—	Brake cable connector	750 W max. (100 V/200 V)	R88A-CNG01B

About Manuals

Please read the relevant manuals of G5-series Pulse Train input Type

English Cat. No.	Japanese Cat. No.	Type	Name
I584	-	R88D-KP/R88M-KE	G5-series Pulse Train Input Type AC SERVOMOTORS AND SERVO DRIVE USER'S MANUAL
W446	SBCA-337	CXONE-AL□□C-V□/-AL□□D-V□	CX-Programmer Operation Manual
W453	SBCE-337	CXONE-AL□□C/D-V□ WS02-DRV01	CX-Drive OPERATION MANUAL

MEMO

MEMO

Read and Understand this Catalog

Please read and understand this catalog before purchasing the product. Please consult your OMRON representative if you have any questions or comments.

Warranty and Limitations of Liability

WARRANTY

OMRON's exclusive warranty is that the products are free from defects in materials and workmanship for a period of one year (or other period if specified) from date of sale by OMRON.

OMRON MAKES NO WARRANTY OR REPRESENTATION, EXPRESS OR IMPLIED, REGARDING NON-INFRINGEMENT, MERCHANTABILITY, OR FITNESS FOR PARTICULAR PURPOSE OF THE PRODUCTS. ANY BUYER OR USER ACKNOWLEDGES THAT THE BUYER OR USER ALONE HAS DETERMINED THAT THE PRODUCTS WILL SUITABLY MEET THE REQUIREMENTS OF THEIR INTENDED USE. OMRON DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED.

LIMITATIONS OF LIABILITY

OMRON SHALL NOT BE RESPONSIBLE FOR SPECIAL, INDIRECT, OR CONSEQUENTIAL DAMAGES, LOSS OF PROFITS, OR COMMERCIAL LOSS IN ANY WAY CONNECTED WITH THE PRODUCTS, WHETHER SUCH CLAIM IS BASED ON CONTRACT, WARRANTY, NEGLIGENCE, OR STRICT LIABILITY.

In no event shall the responsibility of OMRON for any act exceed the individual price of the product on which liability is asserted.

IN NO EVENT SHALL OMRON BE RESPONSIBLE FOR WARRANTY, REPAIR, OR OTHER CLAIMS REGARDING THE PRODUCTS UNLESS OMRON'S ANALYSIS CONFIRMS THAT THE PRODUCTS WERE PROPERLY HANDLED, STORED, INSTALLED, AND MAINTAINED AND NOT SUBJECT TO CONTAMINATION, ABUSE, MISUSE, OR INAPPROPRIATE MODIFICATION OR REPAIR.

Application Considerations

SUITABILITY FOR USE

OMRON shall not be responsible for conformity with any standards, codes, or regulations that apply to the combination of products in the customer's application or use of the products.

Take all necessary steps to determine the suitability of the product for the systems, machines, and equipment with which it will be used.

Know and observe all prohibitions of use applicable to this product.

NEVER USE THE PRODUCTS FOR AN APPLICATION INVOLVING SERIOUS RISK TO LIFE OR PROPERTY WITHOUT ENSURING THAT THE SYSTEM AS A WHOLE HAS BEEN DESIGNED TO ADDRESS THE RISKS, AND THAT THE OMRON PRODUCTS ARE PROPERLY RATED AND INSTALLED FOR THE INTENDED USE WITHIN THE OVERALL EQUIPMENT OR SYSTEM.

PROGRAMMABLE PRODUCTS

OMRON shall not be responsible for the user's programming of a programmable product, or any consequence thereof.

Disclaimers

CHANGE IN SPECIFICATIONS

Product specifications and accessories may be changed at any time based on improvements and other reasons.

It is our practice to change model numbers when published ratings or features are changed, or when significant construction changes are made. However, some specifications of the products may be changed without any notice. When in doubt, special model numbers may be assigned to fix or establish key specifications for your application on your request. Please consult with your OMRON representative at any time to confirm actual specifications of purchased products.

DIMENSIONS AND WEIGHTS

Dimensions and weights are nominal and are not to be used for manufacturing purposes, even when tolerances are shown.

PERFORMANCE DATA

Performance data given in this catalog is provided as a guide for the user in determining suitability and does not constitute a warranty. It may represent the result of OMRON's test conditions, and the users must correlate it to actual application requirements. Actual performance is subject to the OMRON Warranty and Limitations of Liability.



Singapore Office:
OMRON ELECTRONICS PTE. LTD.
 438A Alexandra Road, #05-05/08
 (Lobby 2) Alexandra Technopark
 Singapore 119967
 Tel: (65) 6547 6789
 Fax: (65) 6547 6769
 E-mail: mktg_sg@ap.omron.com



Malaysia Office:
OMRON ELECTRONICS SDN. BHD.
 1101 Level 11 Uptown 1
 1 Jalan SS21/58 Damansara Uptown
 47400 Petaling Jaya, Selangor
 Malaysia
 Tel: (60-3) 7688 2888
 Fax: (60-3) 7688 2833
 E-mail: my_enquiry@ap.omron.com



Thailand Office:
OMRON ELECTRONICS CO. LTD.
 Rasa Tower 2 16th Floor
 555 Phaholyothin Road
 Chatuchak, Bangkok
 10900, Thailand
 Tel: (66-2) 937 0500
 Fax: (66-2) 937 0501
 CRM Call Centre: (66-2) 942 6700
 E-mail: th_enquiry@ap.omron.com



Indonesia Office:
PT. OMRON ELECTRONICS
 Graha Pratama Building, 3A Floor
 Jl. M.T. Haryono Kav 15
 Jakarta Selatan 12810
 Indonesia
 Tel: (62-21) 8370 9555
 Fax: (62-21) 8370 9550
 E-mail: id_enquiry@ap.omron.com



Philippines Office:
OMRON ASIA PACIFIC PTE. LTD.
MANILA REPRESENTATIVE OFFICE
 2nd Floor, Kings Court II Building
 2129 Do Chino Roces Avenue
 Corner Dela Rosa Street
 1231 Makati City, Metro Manila
 Philippines
 Tel: (63-2) 811 2831
 Fax: (63-2) 811 2583
 E-mail: ph_enquiry@ap.omron.com



Australia Offices:
Sydney Office:
OMRON ELECTRONICS PTY. LTD.
 Omron House
 71 Epping Road, North Ryde
 Sydney, New South Wales 2113
 Australia
 Tel: (61-2) 9878 6377
 Fax: (61-2) 9878 6981
 Toll Free: 1800 678838
 E-mail: au_enquiry@ap.omron.com

Melbourne Office:
OMRON ELECTRONICS PTY. LTD.
 Axxess Corporate Park
 Unit 98, 45 Gilby Road
 Mt Waverley Victoria 3149
 Australia
 Tel: (61-3) 8588 2600
 Fax: (61-3) 8588 2690
 E-mail: au_enquiry@ap.omron.com

Brisbane Office:
OMRON ELECTRONICS PTY. LTD.
 Unit 14, 1378 Lytton Road
 Hemmant 4174, Queensland
 Australia
 Tel: (61-7) 3859 3900
 Fax: (61-7) 3348 8701
 E-mail: au_enquiry@ap.omron.com

Adelaide Office:
OMRON ELECTRONICS PTY. LTD.
 Suite 12, 18 Humphries Terrace
 Kilkeny, SA 5009
 Australia
 Tel: (61-8) 8440 6412
 Fax: (61-8) 8345 1204
 E-mail: au_enquiry@ap.omron.com



New Zealand Office:
OMRON ELECTRONICS LTD.
 65 Boston Road, Mt Eden
 Private Bag 92620
 Symonds Street, Auckland
 New Zealand
 Tel: (64-9) 358 4400
 Fax: (64-9) 358 4411
 E-mail: nz_enquiry@ap.omron.com



India Offices:
Mumbai Office:
OMRON AUTOMATION PVT. LTD.
 Kalpataru Square, Office Unit No. 32
 off Andheri-Kurla Road, Andheri (East),
 Mumbai- 400059
 India
 Tel: (91-22) 4228 8400
 Fax: (91-22) 4275 5602
 E-mail: in_enquiry@ap.omron.com

Bangalore Office:
OMRON AUTOMATION PVT. LTD.
 No. 43, G.N. Complex
 St. Johns Road
 Bangalore - 560 042
 India
 Tel: (91-80) 4072 6400/401
 Fax: (91-80) 4146 6403
 E-mail: bangalore_enquiry@ap.omron.com

Gurgaon Office:
OMRON AUTOMATION PVT. LTD.
 No.108 &103-106, 1/F, Sewa Corporation Park,
 MG Road, Gurgaon, Haryana 122002
 India
 Tel: (91-124) 4921700
 Fax: (91-124) 4921777
 E-mail: newdelhi_enquiry@ap.omron.com



Vietnam Offices:
OMRON ASIA PACIFIC PTE. LTD.
HANOI REPRESENTATIVE OFFICE
 6th Floor, 92 Hoang Ngan Street
 Trung Hoa, Cau Giay
 Hanoi, SR Vietnam
 Tel: (84-4) 3556 3444
 Fax: (84-4) 3556 3443
 E-mail: hn_enquiry@ap.omron.com

HO CHI MINH REPRESENTATIVE OFFICE
 2nd Floor, IWA, 102 A-B, Cong Quynh,
 P. Pham Ngu Lao, Q1, TP. Ho Chi Minh
 SR Vietnam
 Tel: (84-8) 3920 4338
 Fax: (84-8) 3920 4335
 E-mail: hcm_enquiry@ap.omron.com

Asia Pacific Head Office:

OMRON ASIA PACIFIC PTE. LTD.

438A Alexandra Road
 #05-05/08
 (Lobby 2) Alexandra Technopark
 Singapore 119967
 Tel: (65) 6835 3011 Fax: (65) 6835 2711
 E-mail: ask@ap.omron.com

Website: www.omron-ap.com

Authorized Distributor